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## Manufacturers' Record.

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BALTIMORE, APRIL 17, 1902.

Next Tuesday is Maryland Day at the Charleston Exposition, and it is expected that not less than 1000 Marylanders, including Governor Smith and his staff, the Maryland commissioners and a number of invited guests of the commissioners, will visit the exposition. April 23 will be New York Day, and quite a party will accompany Governor Odell, Mayor Low and other State and city authorities on the trip, which will occupy nearly a week. Both Maryland and New York were among the foremost in supporting the plan for the exposition, and the visitors from these two States will undoubtedly be given a warm welcome at Charleston.

MILTON H. SMITH.

Whatever may be the final outcome of the rapid moves which are being made in the railroad situation of the South, it is to be hoped that there will be no change in the active management of the Louisville & Nashville. In the development of the South, and especially of the coal and iron interests of Alabama, Milton H. Smith of the Louisville & Nashville has been a power for good which can never be measured. Appreciating years ago the natural advantages of the South for industrial development, he has given the best years of his life to the advancement of this section, and in connection therewith has made the Louisville & Nashville one of the great railroad systems of America. If it should prove that new men and new capital are to become actively identified with the ownership of this system, they can have no better guide in carrying out their plans for the still further advancement of the road than Mr. Smith. The South cannot afford to lose him, and while it is not conceivable that any change in ownership should affect his management of this great property, it behooves the business interests of the South to see that this section does not lose the power and work of Mr. Smith. For years he has rightly grasped the industrial potentialities of the South, and with consummate skill has so managed the Louisville & Nashville that, while increasing the prosperity of that corporation, he has marvelously aided the industrial advancement of the South.

### FOR PRACTICAL EDUCATION.

At the annual meeting of the Texas Cotton Manufacturers' Association last week at Dallas resolutions were adopted calling for a legislative appropriation sufficient to establish and operate a textile school. The adoption of these resolutions followed an address by President E. A. Du Bose, who called attention to the necessity, whenever a new cotton mill is organized in the State, for superintendents, overseers, engineers, machinists and electricians, and the present custom of sending outside of the State for such labor. He insisted that the greatest cotton-growing State in the Union ought to provide the means for equipping and qualifying natives of the State for these lucrative positions, especially as the time is not far distant when the South will be manufacturing finer fabrics. Thus the campaign for practical education in the South widens. It is natural that it should have its inspiration in the textile industry. But it should not stop there. It should extend into all lines in which the rising generation of the South may learn to labor confidently.

### THE APPALACHIAN RESERVE.

The bill for the establishment of a national forest reserve in the Southern Appalachians has been reported favorably in Congress. Nothing should be permitted to prevent its becoming an act. It authorizes the purchase of 4,000,000 acres of land in the mountain region extending from Southern Virginia and West Virginia to Northern Alabama and Georgia, touching South Carolina and Tennessee, and containing not only the greatest variety of timber in the country, but what is of equal importance, the head springs of more than a dozen important rivers emptying into the Atlantic ocean, the Gulf of Mexico and the Mississippi and Ohio rivers. The passage of the bill is of prime importance to secure conditions whereby the value of these streams for transportation and irrigation, and as sources of industrial and commercial power, may be maintained, if not increased, and to give practical encouragement to the development of scientific forestry, the necessity for which is becoming every year more recognized.

### HANDLING OR MAKING.

Figures representing the shipments of cases of shoes from Boston to eight Southern cities during the five weeks ended February 1 last are quoted as follows by the Atlanta Journal:

Atlanta.....	11,953
Richmond.....	11,562
Lynchburg.....	9,657
New Orleans.....	8,294
Nashville.....	8,063
Knoxville.....	4,704
Memphis.....	3,873
Charleston.....	2,505

These figures are made the text for a bit of gratulation on the part of the Journal about the importance of Atlanta as a shoe market. There is another way, however, of looking at the figures, and that way leads to the ques-

tion, why are these Southern cities, much nearer hides and tanbark, dependent for their shoes upon Boston, a thousand miles and more away? Would not there be more substantial benefit in Atlanta shipping 11,953 cases of shoes made in Atlanta than in being the point of distribution for that number of cases?

### TEXAS GIVEN A SEND-OFF.

Just about one year ago representatives of the Merchants' Association and of the Chamber of Commerce of New York city started upon a trip to Texas. The two associations had been active in the measures for the relief of Galveston after the hurricane of September, 1900, and later Governor Sayers, in expressing deep gratitude felt by Texans for New York's generosity, expressed the hope that more intimate and friendly relations might thereby be established, and, as a means to that end, extended an invitation to the associations to visit Texas and to study conditions there. The subsequent trip covered 6198 miles, of which 2800 miles were within the State of Texas. Stops were made at thirty-seven places in the State, and the visitors were given every opportunity within the limited time at their disposal to make themselves familiar with every phase of Texan life of interest to the East. The results of the inquiry along eleven distinct lines have been embodied in a publication of the Merchants' Association of New York, entitled "The Natural Resources and Economic Conditions of the State of Texas." This report deals with water supplies in rivers, in rainfall, in wells and through irrigation; with agricultural conditions, including general physical and climatic characteristics, geology and soils; the staple farm and pastoral products; the mineral resources, especially oil, artesian waters, building stones, gold and silver, copper, coal and gypsum; the forest supplies and timber industry; health conditions, manufacturing possibilities, the labor supply, transportation and export facilities, banking and financial interests, and public educational institutions, with a concluding chapter upon the tendencies of Texas legislation.

This report is valuable not only for the mass of information contained in it and set forth in a style appealing directly to the investor and the home-seeker, but for its practical suggestions. One of the most significant suggestions appears in the statement that, with the exception of the reports of the State geological survey and the State railroad commission, the latter being among the most thorough, useful and intelligent published by any public authority in the United States, and the latter of great merit, but as yet covering a small part of the State, the subcommittees in their search for information were embarrassed by the exceedingly meagerness of official data collated by the State, which the committee regards as almost blind to the great importance of public reports containing

accurate and complete exhibits of the natural resources and industrial possibilities of Texas. The committee truly says that immigrants and outside capital, essential to well-balanced development, demand in advance reliable information about a State, and that the notable lack of such information about Texas has probably been prejudicial to that State, as indicated in its deficient labor supply and the distrustful attitude of outside capital based upon misconception and dense ignorance of actual conditions.

However, the subcommittees endeavored, through wide correspondence and with a hearty co-operation of residents in various parts of the State, particularly railroad officials, to fill the gaps created in the paucity of official matter, and through these unofficial channels gathered numerous monographs published by associations, institutions and individuals, and a mass of unpublished facts furnished by Texas specialists. The conclusions are gratifying to everybody who knows what Texas is and what Texas may be. The visitors found the climate and geologic conditions of Texas of greater range than can be found in any other State or group of States of equal area, are favorable to corresponding diversity of natural products and exceptional productivity in specific classes, and add:

Texas is the only State where temperature, humidity and soil are equally suited to the distinctively Southern crops in conjunction with all the grains, fruits and forage plants of the more Northern States, and likewise to the prolific breeding of all kinds of farm animals.

It has no doubt that the fuel-oil industry in Texas is unrivaled; that it bids fair to effect economic changes in the various manufacturing industries, and of minerals in general it says:

Texas is a State of such magnificent distances—an empire within itself—that a proper investigation of its mineral resources would require not a few days, but a few years. It would require considerable hardihood to definitely state that any mineral is lacking. \* \* \* In every section we found a vast amount of matter indicating the existence of various economic minerals, and in almost every section it seems to me that further exploration is warranted.

The visitors found labor conditions in the State by no means as stable as could be desired, but took this hopeful view:

When these stable conditions as to the supply of labor shall have been reached by the evolution of a sufficiently large and properly skilled artisan class, Texas will have a very important advantage over other sections in the relatively low cost of living, which inevitably results in correspondingly low prices of labor. It is an unshakable fact that because of climatic and physical reason the actual necessities of life cost less and will always cost less in the Southern than in the Northern States. When Southern manufacturing industries have at command an artisan class of persistent industry and highly-developed skill, they will have a decided advantage in labor costs.

But the supply of capital must advance with the supply of labor, and the subcommittee on banking suggests that Texas is far behind in the provision in the way of savings banks for encour-

aging thrift and economy and utilizing a great volume of home capital profitably, while the subcommittee of lumber says:

The natural resources of Texas as a lumber State are very hard to equal in this country, and the natural conditions seem to be very attractive for the investment of capital. But the great capital necessary to operate a large lumbering plant to the best advantage cannot easily be brought together except in the corporate form, and legislation hostile to foreign corporations must necessarily tend to discourage them from subjecting themselves to it.

The subcommittee then refers to the current belief that public sentiment in Texas regards the corporate form of capital as harmful. That subject is specially treated by another subcommittee, which, essaying a judicial role, inclines to the impression "that the legislature might be charged some time with being prejudiced; it had been urged that some were ignorant, but no man had asserted and sustained the statement that they were dishonest;" that the judges of the State were inclined to be rigidly honest and impartial in the administration of justice, and that the bar of the State are energetic, active men of pronounced individualism and of character, and it adds:

The corporation laws of the State of Texas reflect to a limited extent a prejudice, more former than present, against corporations. It may be suggested that the corporation laws lack some of the more modern provisions for the modern business companies; that they fail to provide for certain everyday wants and needs of the business corporations. But such matters are sure to be corrected at the hands of an intelligent legislature as soon as the State of Texas shall have fully and practically experienced what today is certainly coming into its borders, viz., the movement and growth of the modern business company, and the tendency of business and business men to transact their business in proper corporate, rather than in individual form.

These references to the publication of the Merchants' Association demonstrate both the practical value of its investigations and its suggestions based thereon, and the exceedingly friendly spirit toward Texas and the South prevailing in the great financial center of the country. Texas and the South should leave nothing undone to cultivate that spirit and to bring the suggestions to good effect.

#### THE LOSSES IN STRIKES.

Referring to cotton-mill strikes in the South, the Textile Manufacturers' Journal of New York says:

The Southern operative, no matter what his circumstances be, is a firm believer in constitutional privileges, and regards himself the equal under law and by birth to all others, and in his special environment this position makes him assertive of his so-called prerogatives.

In the main that statement is correct, but it is hardly being supported by developments in Augusta, Ga., according to dispatches from Fall River, Mass. At the session last week of the United Textile Workers of America at Fall River it was announced that 10,000 operatives were idle in the Augusta district, and were awaiting instructions from Secretary Hibbert of the national body. The report of the meeting continues:

In response to a communication from the operatives at Dover, N. H., asking what steps should be taken toward obtaining a 10 per cent. advance in wages, the secretary was instructed to inform the operatives that at the present time no strike in Dover would be sanctioned. As the operatives in Augusta, Ga., are now striking for the same advance, the national body does not care to deal with two strikes at one time. The Dover operatives, however, have leave to strike on their own responsibility.

When one reads those statements the

wonder grows how any set of men in the South assertive of their prerogatives can be looking for inspiration as to their conduct in vital matters to any men or set of men in a distant part of the country whom they do not know. Perhaps if they knew them better they would hesitate about accepting their advice or their assistance. Clear-thinking men would recognize the purpose in a refusal to sanction a strike at Dover, N. H., coincident with support given a strike at Augusta, Ga., upon the same basis, and while they are discovering why Northern mill-workers should encourage strikes in Southern mills, but discourage strikes in Northern mills, they might consider certain figures presented in the latest annual report of the commissioner of labor as to the losses incurred through strikes during the past twenty years, as follows:

The loss to employees in the establishments in which strikes occurred for the period of twenty years was \$275,563,478. The loss to employees through lockouts for the same period was \$48,819,745, or a total loss to employees by reason of these two classes of industrial disturbances of \$366,683,223. The number of establishments involved in strikes during this period was 117,509, making an average loss of \$2194 to employees in each establishment in which strikes occurred. The number of persons thrown out of employment by reason of strikes was 6,105,694, making an average loss of \$42 to each person involved. The number of establishments involved in lockouts was 9933, making an average loss of \$4915 to employees in each establishment in which lockouts occurred, while the number of employees thrown out was 504,307, making an average loss to each person involved of \$97. Combining the figures for strikes and lockouts, it is seen that the wage loss to employees, as above stated, was \$366,683,223, and the number of establishments involved 127,442, while 6,610,001 persons were thrown out of employment. These figures show an average wage loss of \$2406 to the employees in each establishment, and an average loss of \$46 to each person involved.

The assistance given to strikers during the twenty years, so far as ascertainable, was \$16,174,733; to those involved in lockouts, \$3,451,461, or a total of \$19,626,194. This sum represents but 6.40 per cent. of the total wage loss incurred in strikes and lockouts, and is probably too low. In addition to this sum, which includes only assistance from labor organizations, much assistance was furnished by outside sympathizers, the amount of which the department had no means of ascertaining.

The loss to employers through strikes during the twenty years amounted to \$122,731,121; their losses through lockouts amounted to \$19,927,983, making a total loss to the establishments or firms involved in strikes and lockouts during this period of \$142,659,104, or an average loss of \$1119 to each firm or establishment involved.

A point not made in the report, but which would be strikers of all kinds may well ponder, is that not only has the loss to employers been less than half the loss to employees through strikes, but that employers are better able than employees to stand the loss.

#### Cane and Cassava.

About 300 delegates from Georgia and Florida attended the cane and cassava convention at Brunswick, Ga., last Saturday. The convention was addressed by Secretary Wilson of the National Department of Agriculture, who has taken a deep interest in the development of cassava culture, and who described the various lines upon which the department is working to aid the farmers of the country. Dr. Wiley, chief chemist of the Agricultural Department; Mr. O. B. Stevens, commissioner of agriculture of Georgia, and Mr. Pope Brown, president of the Georgia Agricultural Society; Col. I. C. Wade of the Southern Railway, Prof. H. E. Stockbridge of the Florida experiment station, Col. Charles P. Good-year, Mr. F. D. Aiken of Brunswick, Mr. W. L. Glessner of the Georgia Southern & Florida Railway and others also spoke.

## CENSUS OFFICE ON THE PRESENT COTTON CROP

By COL. ALFRED B. SHEPPERSON.

(Written for the Manufacturers' Record.)

The newspapers of the 14th inst. published what purported to be a preliminary report of the census office, indicating the yield of the present cotton crop as 9,614,581 bales of 500 pounds gross.

The figures are stated to be based upon reports received by the census office from the cotton ginners, and doubtless represent quantity ginned to April 1 and estimates by the ginners of the quantity to be ginned during the remaining five months of the season from April 1 to August 31. The report compares its figures for the present season with its bulletin of September 28, 1901, which gave the yield of cotton for the season of 1900-1901 as being equivalent to 10,123,027 bales of 500 pounds gross, thus indicating a smaller yield this season than last by 508,446 bales of 500 pounds gross.

Without the slightest intention to disparage the efforts of the census office to give perfectly reliable and trustworthy information respecting all matters which it makes the subject of investigation, I think it may be quite safely assumed that at this time very few cotton merchants or spinners who have studied the matter expect the crop to be less than 10,000,000 bales, while the majority of those in close touch with the South look for a larger crop.

As the average weight of bales since September 1 is 500 pounds gross, the census office figures of yield for this season really equal only 9,444,579 bales of current weights.

According to the compilation of the New York Cotton Exchange, 9,485,296 bales of the present crop had come into sight to April 11, so it is evident that considerably more cotton had actually been received to that date from the crop than the estimate of the census office for the entire yield of the season. Besides the cotton of this season's growth yet to be marketed, it is clear to well-informed men that about 150,000 bales of cotton which was grown last season, but not included in the commercial crop of 1900-1901, will be marketed and included in the present commercial crop.

The census report, which looked very "bullish" at first blush, was utterly without influence on the New York market, as the trade here saw quickly that more cotton than the entire yield indicated by the census office had already come into sight, without taking into consideration the undoubted excess in the takings of the Southern mills since September 1 beyond the quantity estimated for this item in the statement of cotton brought into sight.

It is possible that the census-office figures may really mean only the quantity of cotton ginned to April 1, but if so, it was unfortunate and very misleading to have compared them with the census estimate of the quantity ginned during the entire year ending August 31 last.

A visit to New Orleans, from which I have returned today, gave me the distinct impression that the consensus of the best opinion in that great market was for a crop of about 10,250,000 bales, while sentiment here leans to somewhat higher figures.

Cotton Exchange Building.

New York, April 15, 1902.

#### The Pig-Iron Market.

Matthew Addy & Co. of Cincinnati, in their weekly report, say:

"In this market there is not a great deal doing on the firing line, so to speak, for the ammunition is exhausted. Except for a few odd lots of off iron now and then,

there is no iron for quick shipment. This necessarily has made a quiet market. The whole interest in the market centers on the future and on the problem of getting iron already bought forward fast enough. The railroads are doing better, but there is still great room for improvement. Shipments, for example, that were made on the 20th of last month to points in the Middle West are still in transit. This kind of thing is exasperating in the extreme, for there are many consumers who are suffering for iron who have half a dozen or more cars on the way. Half of our correspondence these days is made up of complaints from customers in regard to the slow time their iron is making, and asking that the railroads be pushed. However, there has been a decided betterment in this direction during the past thirty days, and by May it seems as if things should be in normal shape again. There is an unusually heavy demand for charcoal iron, as well as for car-wheel and malleable irons generally."

#### UNCHANGED AT BIRMINGHAM.

Recent Conditions in the Iron Market Maintained.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., April 15.

There are still sporadic sales of prompt iron at emergency values. These values have only one guide, and that is, buyers' necessities. And in frequent cases the buyers fix by their bids the sales price of iron. Even the price obtained here is materially lower than rules in other primary markets. At Pittsburg No. 2 foundry is quoted openly at \$21, with sales running up to \$21.75. The highest sale admitted here the past week for No. 2 foundry was at \$15.40. The freight to Pittsburg is \$4.15. So our No. 2 foundry at \$15.40 here is \$19.55 Pittsburg, as against, say, \$21, their quotations. This would naturally account for quite an inquiry to this market, which, under ordinary circumstances, we do not get. The larger interests yet maintain the attitude towards the market they adopted some time since. They report quotations as unchanged on the basis of \$12 for No. 2 foundry. But the iron changing hands at these quotations is nominal. What little there is obtained at these quotations goes only to those whose credentials to consideration are above suspicion. The business placed is but a moiety of the demand, and the large interests are much more interested in efforts to satisfy matured and maturing deliveries than in seeking fresh buyers. Untoward circumstances have retarded deliveries, and all are more or less delinquent on them. As to what is called spot and prompt iron the lesser lights have the market, and it is generally the case that the buyer tenders a bid for consideration of the seller. The market price now, as a rule, is not fixed by the seller, but by the buyer. In this way sales were made of No. 2 foundry at \$15, and up to \$15.40. There were reports of sale at \$16, but the writer failed in his efforts of confirmation. Some silver gray brought \$14.50, as also did some No. 3 foundry, while 500 tons of No. 1 foundry was sold at \$16 for delivery last half of this year. Some iron was sold on analysis, but the prices obtained are under lock and key. Nothing could be learned of any transactions in gray forge, and a quotation for that grade would be mere guesswork. The business concluded at the above quotations was very restricted.

At the steel mill the management reports the attainment of a very satisfac-



CROP

tory efficiency, and with it increased production. There is a place for every ton of steel made.

The shipments of pig-iron from Alabama and Tennessee for the month of March were 147,224 tons. Of this amount, the Birmingham district furnished 77,489 tons. The shipments of cast-iron pipe were 16,184 tons, the largest heretofore recorded for any one month. This district furnished 8194 tons of this amount. Of steel, 8383 tons were shipped, and all of this was, of course, furnished by Birmingham. Exports of pig-iron amounted to 180 tons, a faint reminder of what has been.

The Tennessee Company has added ferro-phosphorus to its list of furnace products, and will enter the market as seller of this commodity.

At least three different interests will erect new furnaces in this district on which operations will commence this year. The situation in coal continues good, and the prospects for its keeping good appear to be satisfactory. The Corona Coal & Iron Co., whose holdings are in Walker county, is making preparations to largely increase the output this year, and its example will be followed by other large interests. The result will be largely influenced by the greater or less results of efforts to obtain additional labor. The wages of the miners now is fifty-five cents per ton, and that is the maximum price allowed by the scale now in force. It is probable that it will not be lowered for a considerable time anyway, and it should induce to this district a material accretion to the ranks of labor. J. M. K.

### MARYLAND'S COAL BEDS.

#### Features of the Bituminous Measures in the State.

The coal measures of Maryland are a southward continuation of those in the basins of Somerset county, Pennsylvania. They occupy a strip along the western border of Allegany county about twenty miles long and averaging five miles in width, and they cover somewhat over half, or about 400 square miles, of Garrett county. They are discussed in Part III of the XXII Annual Report of the Geological Survey, now in press, by Mr. David White, who notes the excellent work of the geologists of the Maryland Geological Survey, upon which, for the most part, his own statements are based.

The coal measures lie in three broad northeast-southwest basins. The easternmost is the Potomac basin, called locally the Frostburg, the George's Creek, the Elk Garden and the Upper Potomac basins. North of the Potomac this basin lies in Allegany and Garrett counties; south of Piedmont nearly all of the western half of the basin is in Garrett county. By reason of the depth and accessibility of its coal, and of its geographical advantage with reference to tidewater and the Eastern markets, the Potomac basin is by far the most important of the three main basins, as its Big or Pittsburg bed is the chief source of coal in Maryland. Savage and Meadow mountains separate the Potomac basin from the second or Castleman basin in Northern Garrett county, which is drained by the Castleman river. The third, or Youghiogheny basin, includes a Lower Youghiogheny basin in the northwestern and an Upper Youghiogheny basin in the western part of Garrett county. Both of these two main basins are but little developed commercially, from lack of railway facilities.

The coal beds sufficiently thick to deserve mention are the Bloomington, or Railroad coal, in Garrett county, from one to nearly three feet thick; the Mt. Savage coal, Allegany county, averaging about two feet thick, extracted and used at the

clay mines for firing the brick; the West-ernport, or Two-foot coal, Allegany county, averaging from two to three feet thick; the Bluebaugh coal, in northeastern George's Creek district, Allegany, over five feet thick in places, but variable; the Parker coal, Allegany, ranging from a few inches to nearly five feet in thickness near Warrior Run; the Davis or Six-foot seam, in the George's Creek district, which thickens as it goes south past Piedmont into Garrett, up to nearly nine feet near the corner of the State; the Thomas, or Three-foot coal, running from about three feet thick in the George's Creek district to five and one-half feet at Bayard, and exceeding six feet at Fairfax Knob; the Barton coal, from two and one-half to three and one-half feet thick in the George's Creek district—a valuable source of fuel for eventual exploitation; the Dirty Nine-foot bed, varying from over two feet to over ten feet in thickness, though generally of no importance; the Elk Garden, or Fourteen-foot bed, Allegany county, varying from five feet north of Frostburg to about nine or ten feet south of Louisaconing, to over fourteen feet of workable coal near Franklin, and to about twenty feet at Elk Garden. This is the fuel known to the trade as Cumberland coal, one of the highest known grades of semi-bituminous steam coal. It is largely exhausted except in the region of Frostburg. This bed has an area of about thirty-five square miles. The Tyson, or Gas bed, is reported as ranging from four feet thick near Louisaconing to about seven feet at Franklin, Allegany; the Koontz bed in the George's Creek district varies from five feet to over seven feet in thickness, but is much broken up.

The Cumberland coal cokes satisfactorily, though on account of the greater profit in the raw fuel no coke is now made.

The Big, or Elk Garden bed, in the George's Creek and Frostburg districts, was one of the earliest of the northern bituminous seams to be worked. Coal has been extracted near Frostburg since about 1804, though not until 1830 was it shipped east in barges on the Potomac river. The commercial exploitation of the coal developed rapidly after the construction of the Baltimore & Ohio Railroad in 1842, and was further promoted by the completion of the Chesapeake & Ohio canal in 1850.

Maryland, ranking eleventh among the coal-producing States, had an output in 1900 of 4,024,688 short tons, valued at \$3,937,381. Much the greater part of this coal came from the Elk Garden bed, most of the remainder being obtained from the Davis and Thomas beds along the Upper Potomac in Garrett county.

With the exhaustion of the Big bed, the indications are that the thin beds will be more and more rapidly developed, as is already the case along the lines of the West Virginia Central Railroad towards the head of the Upper Potomac basin, where the Davis and the Thomas beds are in fine condition.

Most of the Maryland mines are operated by the "room-and-pillar" method. There is relatively little machine mining. The wage scale of mining in operation in 1901 was fifty-five cents per ton, run of mine, for hand work, or forty cents for machine work. The cost per ton of coal f. o. b. cars at the mines ranges from 67½ cents to \$1, the average being about eighty-one cents. The greater part of the steam coal mined in Western Maryland goes to the factories and shops of the Eastern States north of North Carolina, the chief points of destination being Washington, Baltimore, Philadelphia and Staten Island or South Amboy. A large percentage is used for marine consumption. The Potomac basin is traversed by the West Virginia Central & Pittsburg,

the Baltimore & Ohio, the George's Creek & Cumberland, and the Cumberland & Pennsylvania railroads. All the railways converge at Cumberland, whence the coal is transported by the Baltimore & Ohio Railroad, the Pennsylvania system and the Chesapeake & Ohio canal. The cost of transportation by the all-rail route from the George's Creek district is \$1.45 per ton for track delivery to Washington, Baltimore and Philadelphia, and for water shipment \$1.18 to Baltimore, \$1.25 to Philadelphia and \$1.55 to South Amboy.

### Corsicana Oil Notes.

[Special Cor. Manufacturers' Record.]

Corsicana, Texas, April 10.

The recent chartering of a \$3,000,000 pipe-line company, with the main office in Corsicana, throws some light on the future operations in the Texas oil fields. The purposes of the company are to store and transport oil and gas and other minerals, to buy, sell and furnish oil and gas for light and heat, to construct and operate pipe lines, tanks, pump stations and other apparatus necessary to operate such pipe lines between different points in the State; also authority to own and occupy land and rights of way, buildings, etc., necessary for the purpose of the corporation. The directory shows the name of John W. Gates of the big steel combine, J. S. Cullinan of Corsicana and two members of the Hogg-Swayne syndicate of Beaumont, and capitalists of New York and Chicago.

It is supposed that this company insures competition for the output of the illuminating-oil wells of Corsicana. More interest is manifested in the Corsicana field than for some time, and development work is moving with more vigor.

Oil was struck yesterday at Frost, twenty miles west of this city, while drilling in a well for water. The quantity was small, but the indications are good for a paying plan on further development.

Work was begun yesterday on the new \$30,000 public-school building, the fifth of its kind for Corsicana.

The Commercial Hotel is to be remodeled and enlarged to about double its present capacity.

The rolling stock and steel rails for the new Corsicana electric street railway have been purchased. The cars are thirty feet long and modern in build.

Whitesell's big brick plant has installed electric-light machines, and is now running night and day to fill orders.

### The Beaumont Oil Fields.

[Special Cor. Manufacturers' Record.]

Beaumont, Texas, April 12.

It is announced that W. T. McCue, a banker of Staunton, Va., and Mr. R. H. Edmunds of Baltimore have secured an option on half the proven land in Spindle Top, which indicates the probability of the organization of a great oil deal. The oil men of Beaumont have been looking for something of this kind for some time, but did not know just where to expect the information from nor who would be the leader in the movement. An institution of this kind could undoubtedly be of vast benefit to this community.

Thirty cars of machinery for the George A. Burt refinery have been received, and the work of construction on this institution will be pushed as rapidly as is possible for men and money to do it.

The recent burning of the Santa Fe roundhouse here, in which were engines with tanks full of Beaumont oil, has demonstrated to the entire satisfaction of the more reasonably inclined people that the oil is not of an explosive character, but, on the other hand, is easily controlled, and is really no more dangerous than coal, wood or any other fuel. The tanks were heated intensely, but the oil in them did

not burn or explode, and the building itself fell in upon them as the fire raged.

There have been no new developments in Saratoga or Sour Lake this week other than the breaking loose of another mud gusher at the former place, in which mud, gas and oil were thrown fifty feet above the top of the 60-foot derrick. The company will at once make an effort to drill deeper. The general impression here is that the oil is just below these gas pockets in gushing quantities. At Sour Lake six new rigs have started to drilling, and the place represents an activity that is of considerable strength.

### Japanese Studying Oil.

In an interview at Beaumont Chief Engineer Otsuka of the Imperial Steel Works of Japan, who is investigating American oil fields, said:

"We desire particularly to investigate the American methods of drilling, particularly the rotary system, which is used more extensively here than any other field in the world. As you know, there is considerable oil produced in our country, but the process is slow, and with the system that has produced over 200 gushers in little more than one year Japan may become one of the leading petroleum-producing countries in the world. There are several railway locomotives in Japan using fuel oil, and if it can be imported at a price that would compete with coal there is no question but what fuel oil would have the preference. That is a matter that I have not thoroughly investigated, but it will be taken up later on, and it is not improbable that fuel oil will be imported into Japan. I have heard some remarkable descriptions of the Beaumont field, and expect to visit Spindle Top tomorrow. I have been through the Pennsylvania field, and found it a great oil-producing territory, but you have something out of the ordinary to oil men and geologists, and Beaumont has reached a stage where a man would hardly be considered up on petroleum if he had never seen a Spindle Top gusher."

### Big Oil Contract.

It is announced that the United Gas Improvement Co. has awarded to the Lone Star & Crescent Oil Co. a contract for the delivery of 1,500,000 barrels of crude Texas oil per annum for five years. The oil is to be used in the manufacture of illuminating gas, and is expected to insure a saving in expenses of about \$750,000 a year. This contract, involving an expenditure of more than \$2,000,000, becomes effective at once. The oil will be sent from the Lone Star & Crescent gushers in the Beaumont field by pipe line to Sabine Pass, and thence by steamers to New York and Philadelphia.

### Notes from Huntsville.

[Special Cor. Manufacturers' Record.]

Huntsville, Ala., April 14.

R. E. Pettus, president Chamber of Commerce, is in correspondence with Indiana capitalists who are seeking a Southern location for an iron-bed factory, and Mr. Pettus states to the Manufacturers' Record correspondent that there is a chance for this city to get the plant.

J. M. McKee has secured the contract to remodel the Harrison Bros.' block on Commercial Row.

The charter has been signed for the proposed \$7,000,000 trunk-line railroad through Kentucky, Tennessee and Alabama. All necessary money is in hand also.

During the first three months of this year the imports at Galveston were valued at \$554,806, an increase over the same period last year of \$192,217. The most of these imports passed through Galveston on their way to Mexico.

## MR. SEARCH'S FAREWELL.

## His Last Address as President of the National Manufacturers.

The National Association of Manufacturers is in session this week at Indianapolis. In his annual report, the sixth he has presented, President Theodore C. Search of Philadelphia called attention to the declining exports of American manufactured products, and urged manufacturers not to neglect their foreign customers in this era of extraordinary home demand, lest in times of depression they should find their foreign trade destroyed and no export outlets for the surplus of an overstocked home market.

Reciprocity formed one of the chief topics of the report, and the work of the National Reciprocity Convention, which was held in Washington last November under the auspices of the association, was reviewed at length. Mr. Search maintained that the Washington convention was thoroughly representative of the manufacturing interests of the country, and its action indicative of the true sentiments of the manufacturers concerning reciprocity. Assuming the doubtful chances of any action on the pending treaties of reciprocity with France and Argentina, he declared that further development of the reciprocal trade idea depended upon the possibilities of special legislation like that for which the proposed concession to Cuba affords a precedent. Mr. Search said:

"The concrete proposition which now confronts us appears to me to be about like this: Is it feasible, safe and expedient to undertake to adjust our commercial relations with other nations by means of special legislation, dealing with each particular case, or is it preferable from all points of view to seek the same end by delegating to the executive arm of the government the power to negotiate international agreements for reciprocal concessions.

"Our treatment of the Cuban problem furnishes the precedent for the new departure in reciprocity, but while we recognize certain obvious advantages in this plan, we must not close our eyes to the dangers that lie in such a course. We must recognize that such a method of procedure practically invites a continuous tinkering of the tariff, the possibilities of which we can view only with distrust and alarm."

With regard to the proposition to create a new federal department, Mr. Search expressed gratification at the progress that had been made towards the passage of the Nelson bill, and urged more energetic personal support of the measure by the individual members of the association.

The principle of direct government aid to the merchant marine, as embodied in the pending ship-subsidy bill, was commended to the association as in perfect accord with the declarations of previous annual conventions.

Concerning isthmian-canal projects, Mr. Search took the position that the people really cared but little whether the Panama or the Nicaragua route should be chosen, so long as some decisive action should be taken by Congress which would advance the matter to the point of actual undertaking of the construction of an interoceanic waterway.

The pending bills for the reorganization of the consular service on practical business lines were recommended for approval by the association.

Attention of the association was directed to the pending eight-hour bill and the "anti-injunction bill," both of which Mr. Search said very gravely concerned the interests of the manufacturers of the country, and should not be permitted to become laws without having been most

carefully considered in their bearing upon manufacturing interests.

What had been done during the year to protect members against the imposition of unconstitutional taxes and license fees under the foreign corporation laws of the various States was reported, and members were recommended to resist such discriminating and unjust demands.

Commercial education was discussed at considerable length, and Mr. Search recommended that the association should consider the feasibility of organizing a system of examination and certification of commercial students upon their completion of prescribed courses of study, or the establishment of correspondence courses of instruction, as alternative plans to meet the prevailing desire for larger facilities for instruction in practical business methods, more particularly those entering into international trade.

Mr. Search discussed with much emphasis the needs of the association as demonstrated by the six years of his presidency. He said that the prevailing prosperity of the manufacturers and the concentration of their attention upon the problems of extraordinary business activity made it exceedingly difficult to command their support of such broad work as that for which the association was formed. The greatest need of the organization was a larger income with which to carry on the increasing volume of work, and he advocated the increase of the annual fee from \$50 to \$100.

As a means of increasing the influence and prestige of the association, Mr. Search suggested the holding of semi-annual conventions of manufacturers and merchants for the consideration of special topics, such, for example, as methods of extending export trade. He also recommended the subdivision of the work of the association among a number of communities, a plan which he believed would give larger results and tend to strengthen the organization in many ways.

Mr. Search explained that his retirement from the presidency did not mean any relinquishment of his active interest in the association, but was due solely to his desire to be relieved from the arduous work of the position and to the increasing demands of his private business interests.

## Texas' State Buildings.

During the past three years, under the administration of Governor Sayers, there have been spent or contracted to be spent out of the general revenue of Texas \$1,346,845 on improvements of State institutions or in building new ones. The Galveston News has made a careful tabulation of these expenditures for permanent improvements as follows:

Penitentiaries .....	\$264,343 97
Epileptic colony .....	250,000 00
North Texas Insane Asylum .....	136,056 49
Agricultural and Mechanical College .....	120,500 00
Deaf and Dumb Institute .....	113,845 00
State Lunatic Asylum .....	73,500 00
Southwestern Insane Asylum .....	60,000 00
Quarantine Station (Galveston) .....	60,000 00
Medical Branch University (Galveston) .....	53,063 00
Girls' Industrial School (new) .....	50,000 00
Southwest Texas Normal (San Marcos) .....	45,000 00
Prairie View Normal .....	25,515 00
Confederate Home .....	25,000 00
Colored Deaf, Dumb and Blind School .....	16,514 19
Orphans' Home .....	13,807 65
Sam Houston Normal .....	10,000 00
New Experimental Station (Tropico) .....	10,000 00
Blind Institute .....	9,000 00
<b>Total .....</b>	<b>\$1,346,845 30</b>

The Southern Nut Growers' Association has been organized, with Messrs. G. M. Bacon of De Witt, Ga., president, and J. F. Wilson of Poulan, Ga., secretary. This organization is an outgrowth of the widespread interest in pecan growing in the South, and it will labor to encourage nut culture and to extend the markets for its products.

## IN THE COTTON PALACE.

## Lessons of the Exposition at Charleston.

[Special Cor. Manufacturers' Record.]  
Charleston, S. C., April 14.

Every visitor to the South Carolina, Interstate and West Indian Exposition is certain to notice the very attractive exhibits of American manufacturers in the Cotton Palace, and all interested in such matters find time to examine and study the story that is thus illustrative of the marvelous growth of the Southern States in the past quarter of a century.

The Cotton Palace is the largest and most imposing building on the fair grounds. It contains 50,000 square feet of floor space, with a dome rising to a height of nearly 200 feet and a facade of more than 300 feet. The structure occupies the most conspicuous portion of the Ivory City. It presents a very pretty view by the light of the sun, but at night, when blazing with hundreds of many-colored electric lights, it cannot fail to inspire one with even a remote sense of appreciation of the beautiful.

The Cotton Palace and its contents form one of the most important as well as interesting features of the entire show, and the reason is not difficult to grasp. One of the greatest ends of the exposition promoters was to build up the interests of the only ruler of the South—cotton. There seems to be no spot on the globe where this plant thrives as it does in the Southern States of America, and the world looks to this section for much of the fabric with which to clothe itself. But within the past two years the Oriental trade has been seriously damaged by international complications in China. Cotton has been a drug on the market in the Far East, and the producers have, with characteristic farsightedness and shrewdness, determined to attempt opening up new markets for their wares. In the West Indies there is a demand, and in order that those islands may get in close touch with the country which is likely in the future to use so much of their cotton, it was decided to interest them, among others, in an exposition. This is one of the numerous uses of the fair at Charleston. Not only is the great development of the South in recent years shown, but the glowing possibilities of the future are depicted in a clear and forcible manner in the exhibits of this building.

As has been before pointed out in these columns, the purpose of the exposition at Charleston is to establish closer trade relations between the United States and the West Indies and the lower Americas; to promote the Southern manufactures of cotton and iron; to prove the advantages of Charleston as the connecting link between the producers of the Southwestern States and the Mississippi valley on one side and the markets of the world on the other. There is a splendid field in the West Indies for the development of American commerce. During the last fiscal year the per capita imports from the United States by the people of the West Indies amounted to \$7.90 in value, by South America but \$1.18, by the Philippine Islands but thirty-four cents, and by China but three cents. Charleston being the nearest and the most available port on the Atlantic coast for the development of the West Indian trade with the Southern States, it is hoped that the exposition will lead to the opening of new markets for the products of the fields, forests and mines of the South. The people of Cuba and Porto Rico have been so much impressed with the importance of establishing intimate trade relations with the Southern States that they have collected at the exposition one of the most extensive and typical exhibits of the resources

of those islands that has ever before been made. This will probably give one at least some idea of the importance of the exhibits contained in the Cotton Palace, what they represent, and the results which it is to be sincerely trusted they will be influential in bringing about in the near future.

It is possible that many people would be interested in the following complete list of the firms taking part in the American manufacturers' joint export exhibits, with the goods shown, in the Cotton Palace:

American Spinning Co., Greenville, S. C., bleached and unbleached domestics, cones and yarns.  
Arcade Cotton Mill, Rock Hill, S. C., bleached shirting and percales.  
Abbeville Cotton Mill, Abbeville, S. C., unbleached sheeting.  
Avalon Mills, Mayadon, N. C., hosiery and underwear.  
Avon Mills, Gastonia, N. C., convertible goods, skirting and linings.  
Anderson Cotton Mill, Anderson, S. C., cotton sheeting.  
Atherton Mills, Charlotte, N. C., cotton yarns.  
Alamance Mills, Burlington, N. C., plaids and checks.  
Belton Mills, Belton, S. C., flannelettes, shirting and sheeting.  
Brandon Mills, Greenville, S. C., unbleached shirting and sheeting.  
R. A. Blythe, Philadelphia, mercerized goods, bobbins, cones and yarns.  
Cold Springs Bleaching and Finishing Works, Yardley, Pa., madras shirting, cambrie lawns, organdie, finished lawns, Bedford cord, duck, cream sateen, bureau scarfs, table covers, barber towels, luck towels, plain white Turkish towels and red-border towels.  
Cannon Manufacturing Co., Concord, N. C., bleached (Cannon) cloth.  
Cowpens Manufacturing Co., Cowpens, S. C., Sea Island sheeting.  
Cherokee Falls Manufacturing Co., Cherokee Falls, S. C., convertible goods, bobbins, yarns, seamless bags and ropes.  
Clifton Manufacturing Co., Clifton, S. C., heavy sheetings and drills.  
Delgado Mills, Wilmington, N. C., sheeting.  
D. E. Converse Co., Clifton, S. C., drillings and sheetings.  
W. J. Dickey & Sons, Baltimore, all-wool Jerseys and cotton duck.  
Elmira Cotton Mills, Burlington, N. C., checks, plaids and yarns.  
Edgefield Manufacturing Co., Edgefield, S. C., sheetings and convertible goods.  
Excelsior Knitting Mills, Union, S. C., hosiery, cotton batting and cones.  
Enoree Manufacturing Co., Enoree, S. C., unbleached sheetings and drills.  
Easley Manufacturing Co., Easley, S. C., unbleached sheetings.  
Fairfield Cotton Mills, Wimsboro, S. C., unbleached domestics.  
Florence Mills, Forest City, N. C., unbleached domestics.  
Fort Mill Manufacturing Co., Fort Mill, S. C., staple gingham.  
Grendel Mills, Greenwood, S. C., unbleached domestics, yarns and bobbins.  
Granby Mills, Columbia, S. C., convertible goods and bleached shirtings.  
Graniteville Manufacturing Co., Graniteville, S. C., unbleached sheeting and drills.  
Gastonia Manufacturing Co., Gastonia, N. C., colored linings and shirtings.  
Greenwood Cotton Mills, Greenwood, S. C., unbleached sheetings, yarns, drills and bobbins.  
Glencoe Cotton Mills, Burlington, N. C., chevrets, plaids and shirting.  
Gaffney Manufacturing Co., Gaffney, S. C., bleached domestics, percales, skirt linings and ready-made shirtwaists.



# CHINESE EXCLUSION AND AMERICAN INDUSTRY

By HON. JOHN L. McLAURIN of South Carolina.\*

The pending bill is calculated, by its restrictive action and inimical spirit, to kill our trade with China.

This is a consideration of vital importance to the State which I have the honor in part to represent, to the whole South, and in an almost equal degree to New England, New York and, indeed, the entire country. If this Chinese trade could not be secured by us except at the price of cooly immigration I would be the last man to raise my voice in behalf of it. The South has had quite enough of "race issue," as it is, and heaven forbid that another race issue should be precipitated upon the South, or the North either, by any further irruption of a Mongolian nature!

But as the exclusion of Chinese laborers is assured under both measures—the present law and the new measure under discussion—and as the former nourishes our trade with China, while the latter would check and stunt if not ruin it, why should we hesitate to express our preference for a continuance of the existing law?

Speaking for South Carolina, Mr. President, I may safely say that South Carolina demands first of all that this country shall do its duty on a question of honor—that it shall maintain its integrity in the fulfillment of its treaty obligations; and, next, that this country shall so legislate as to secure fair play for all its sections and all its citizens alike—for rich and for poor, for the laborers on the Pacific coast and also for the laborers on the Atlantic coast, for the miners in California and also for the mill-workers of South Carolina. Aye, fair play, too, for the governments and respectable citizens of all foreign nations as well, including China. South Carolina does not want contract labor or cooly labor in this country, and would not tolerate it. Nobody wants it. It is out of the question—out of the calculation altogether. It will not be had under the present law or under the proposed law or under any other law, past, present or future. But fair play we ought to have and must have for all respectable labor, for all respectable business men and enterprises, and for all respectable governments under the sun.

Now, is it fair to the people of the South, just as they are beginning to prosper in manufacturing and commercial enterprises, after long years of trouble and privation, to tear down and crush their new enterprises, on the assumption that such a ruinous policy is necessary in order to keep out the Chinese, when in point of fact it is not at all necessary and the Chinese are being kept out by the existing law? That is the plain business proposition at the basis of the whole question.

Let us look at the matter a little more in detail.

South Carolina is now the second cotton-manufacturing State in the Union. The development of its cotton-mill industry has been without parallel in any other part of the United States. In 1890 there were thirty-four establishments in South Carolina devoted to this industry, representing a capital of \$11,141,833, employing 8071 wage-earners, and turning out products valued at \$9,800,798. In 1900 the number of establishments had increased to eighty, the amount of capital to \$39,258,946, the number of wage-earners to 30,201, and the value of products to \$29,723,919. While for the whole of the

United States the average increase, for the decade, of capital employed in cotton manufactures was 32 per cent., that of South Carolina was 252 per cent. While the average increase in the number of wage-earners was 31½ per cent., that of South Carolina was 274 per cent. While the average increase in the value of products was 26½ per cent., that of South Carolina was 203 per cent. The manufacture of cotton goods is now the most important industry of South Carolina, since it gives employment to 62.7 per cent. of the wage-earners employed in the State, and turns out 50.6 per cent. of the total value of the manufactures produced in the State. The development of this industry, which was temporarily arrested by the Chinese troubles a year ago, has been vigorously resumed, and bids fair to proceed at such a pace that South Carolina, which has already passed Rhode Island, will in the next ten years take the place of Massachusetts as the foremost cotton-manufacturing State in the Union.

This brilliant prospect can be blighted—the prosperity of the South Carolina mills and the gaining of a livelihood by an army of 60,000 workers can be interrupted—in only one way, and that is by a shutting down of the export demand for American cotton cloth. That demand amounted in the first two months of the present calendar year to more than \$6,000,000, and it is being maintained at a rate without example in the commercial history of the country, so that for the current fiscal year our exports of manufactured cottons will probably exceed in value \$30,000,000, or fully \$6,000,000 more than in 1900, the most prosperous of any of the preceding years. Of this export demand 60 per cent. is represented by our sales to China, and it is on the continuance and increase of these sales that the prosperity of the cotton industry, not only of South Carolina, but of the whole United States, absolutely depends.

That this fact is keenly appreciated in business circles in the North as well as in the South was strikingly demonstrated at the recent hearings before the committee on immigration, on which occasions there were present representatives of the cotton-manufacturing interests of both sections, and of many other commercial and business interests as well—men from the North like Messrs. Charles S. Hamlin of the Boston Merchants' Association and Chamber of Commerce; Theophilus Parsons, president of the Arkwright Club of cotton manufacturers; P. Y. De Normandie of the Laconia and Pepperell Mills of Maine; Clarence Cary of the American China Development Company, which is now building a railroad in China; John Foord, Silas D. Webb and other prominent business men; while from the South there were Mr. D. A. Tompkins, in behalf of the North Carolina cotton-mill owners, and from South Carolina a large and influential delegation, including Messrs. Ellison A. Smyth of the Pelzer and Belton Mills; W. A. Courtenay of the Courtenay Manufacturing Co.; John B. Cleveland of the Whitney Manufacturing Co.; J. H. Montgomery of the Pacolet and Spartan Mills; John C. Cary of the Lockhart Mills, and T. J. Hickman of the Graniteville Mills, representing, probably, at least one-half of the entire cotton-manufacturing interests of the State.

All of these representative business men bore witness that they were opposed to cooly immigration, and did not wish any legislation that would make exclusion less

stringent, but that they objected to the proposed new legislation because, while it was not needed for the purposes of exclusion, it would necessarily subject reputable Chinese merchants and other business men to much personal inconvenience and annoyance, and would give them and their government good cause for taking offense, so that the natural effect would be to greatly injure our trade relations with China and to retard, if not to stop altogether, the progress of that trade.

The assertion is often made on the opposite side of the question that China will continue to trade with us just the same, no matter how we treat her. This assertion is as discourteous to China as it is untrue to the principles of human nature and to the recorded facts of history. Without multiplying illustrations, we need only to go back a year or two to the recent Boxer disturbances to show what would probably happen in case of the passage of the pending bill. The testimony of Mr. Ellison A. Smyth before the committee in one of the hearings that I have alluded to is so important and clear on this point that I quote a few sentences of it here. Mr. Smyth said:

"Largely the mill interest in the South is dependent on the export trade, and this is peculiarly so with the trade to China. This was very acutely felt during the depression incident to the war in China, which lasted about twelve months, in its effect on the Southern millers. I doubt if there was one Southern mill, or at least there were very few Southern mills, that during the fiscal year ending last July were able to show any profit at all on their business during the preceding twelve months, and most of them showed very considerable losses owing to the stagnation in trade, the piling up of their goods, and their inability to sell their products. And the efforts to get into other trades and to make other goods that were used in this country led to very fierce competition with the mills of the country that were built and that are devoted to the home trade. \* \* \* If any additional restrictions are imposed upon the coming to this country of Chinese merchants it may lead to very disastrous results for the Southern manufacturers and cause very fierce competition between the mills in this country for our home trade, as there will be a large production that will either have to be sold at some price, made of some kind of goods to suit the home trade, or the mills will have to stand idle. It would lead to very great competition between the mills of the South and the mills in New England for the home trade."

It may seem strange that the difference between profit and loss on an industry whose annual product is valued at \$339,000,000 should hinge upon the retention of an export demand of \$17,000,000 or \$18,000,000 a year. But this is not mere guesswork. It is a fact which has been demonstrated by costly experience. What was the amount of the falling off in export business which, as stated by Mr. Smyth, the executive head of the great Pelzer group of mills in South Carolina, began to spell ruin for the cotton mills of the South and demoralization for the entire cotton textile market of the country? It was simply the difference between an export to China of \$8,783,134 in the fiscal year 1900 and \$4,552,534 in the fiscal year 1901. If a decrease in the export demand amounting to only a little more than \$4,000,000 had the results which every cotton manufacturer knows to his cost it had a year ago, what might be expected from an interruption of the present very large volume of our exports to the Chinese empire?

Now, it does not need a war in China

\*From his speech made in the Senate, April 14, on the Chinese Exclusion bill.

to bring about a return of the conditions which so greatly affected our trade there during the fiscal year 1901, and which had so disastrous an influence on the entire cotton-manufacturing industry of the United States. You have only to accept the logical results of the policy toward China and the Chinese which is embodied in the provisions of the bill before you to bring about a condition of commercial warfare between this country and its chief customer in the Orient, in the course of which the trade of which I have given the returns will shrink to or below the dimensions it had during the Boxer troubles of 1900. The statement has been made before a committee of the Senate and repeated here on this floor that we have nothing to fear from the retaliation of China in any case. Let me quote to you on this point the testimony of possibly the largest exporter in this country of cotton domestics to China, Mr. Silas D. Webb, the president of the China & Japan Trading Co.:

"All business in China is done under a system of guilds, based very much on the lines of the Federation of Labor in the United States. No person can go into business in China without being a member of a guild—that is, into any business of importance. The guild is governed in such a way that if its members should take a notion that the Americans were insulting them they would have a meeting quietly and state that they did not want to do any business with Americans or handle American goods, and it would be utterly impossible for any business to be done."

We shall certainly do our best to provoke such action if we insist on placing such annoying and humiliating restrictions upon the entrance and business activity in the United States of Chinese merchants or students as would be resented by the citizens of the pettiest nation with which we have commercial intercourse. Our trade with Japan has been greatly furthered by the fact that so many Japanese students and merchants came here to investigate and carried home with them not only American ideas, but also American wants, and so helped to create a market for our merchandise. We shall deliberately surrender any such advantage in regard to China if we turn over her mercantile representatives to our commercial rivals in Europe. If we persist in subjecting China to humiliating treatment, what ground could we have to complain if the Chinese government in the negotiation of the pending commercial treaties should say to the United States: "You cannot enjoy the benefit of the most-favored-nation clause in any new agreement touching your commerce with us, because you refuse to accord to our people the kind of treatment which the people of every other nation with which you have treaties demand and receive at your hands?" I do not see that we should have any just cause for protest if China were to place the same embargo on our merchants, students and travelers visiting the empire that we are now asked by the advocates of the pending bill to make perpetual in regard to hers.

Now, reverting to the conditions in the South, what would be the chief effect of a shut-down in the China trade and the consequent collapse of Southern cotton manufacturing? Who would be the chief sufferers? The effect would be to glut the home market with cotton goods in a few weeks, and then to close up the mills. Who would be the chief sufferers? Not the mill-owners, not the cotton-growers, not the merchants and exporters, though all these would suffer much. The chief sufferers would be the operatives in the

mills—the thousands of happy, busy, well-paid wage-earners now employed steadily in these mills and making a good living under agreeable and comfortable circumstances. These deserving operatives, most of whom have no other means of support and hardly any reserve funds, would be suddenly thrown out of employment, and who can measure the suffering that would ensue? In my own State the number of these operatives would reach perhaps 60,000, to say nothing of their families and the very many who would be injured directly or indirectly by their loss of work; but there would be hundreds of thousands besides throughout the South who would be compelled to suffer in like manner. The effect would be felt acutely and painfully in North Carolina, in Georgia, in Alabama—in all the States where cotton is grown or cotton goods are manufactured. The needs and rights of the laborers on the Pacific coast are entitled to be respected and defended, but when their principal demand can be satisfied by the present existing law, under which their Southern fellow-laborers can thrive, why should they insist on a new law which will serve their own purpose no better, and under which their Southern fellow-laborers will suffer so much poverty and misery.

The pending bill is not drawn in the interests of the United States. Its operation, if enacted, would infallibly injure the country instead of benefiting it. It is claimed to have been framed for the relief and elevation of American labor. Instead of that it would unquestionably inflict enormous loss and distress upon American labor. Without conferring upon the working people of the Pacific coast any further advantages than they now possess, it would take away from the operatives of the South much of the advantage that they have fairly won. It would likewise injuriously affect the business interests of the North, and, I believe, of the Pacific coast as well.

Imputing to my friends who advocate this measure all of the purity of purpose and honesty of intention that I claim for myself, I am still forced to conclude, after impartial study of the question, that the bill as it is presented for passage is faulty in conception, faulty in execution, faulty in deduction, faulty in logic, faulty in its premises and its conclusions. If this is too strongly put, I am at least sure that there is sufficient doubt as to the efficacy of this measure to accomplish its desired purpose and sufficient menace in the probable results of its unfairness to the great Empire of China to make wise its postponement and the postponement of any legislation upon this question until the expiration of the present treaty with China, which embraces the existing exclusion law.

#### For a Southern Tour.

The preliminary itinerary of Mr. Robert C. Ogden's New York party, interested in the Southern education problem, provides for a start from New York on the evening of April 21 in a train consisting of one sleeping-car, two apartment-cars, an observation and compartment car, a dining-car and a combination baggage and smokers' car. The party will reach Hampton, Va., on April 22 and will witness exercises at Hampton Institute on that day and the next, leaving in the early evening for Richmond, where a stop for two hours will be made for a reception. The party will reach Athens, Ga., in time to attend the conference for education in the South on April 24-27. From Athens it will visit Calhoun, Montgomery and Auburn, Ala., and will spend April 29 at Tuskegee Institute. The next day will be spent at Chattanooga and Knox-

ville, May 1 at Christiansburg, Blacksburg and Lexington, and on May 2 Luray Caverns and the Gettysburg battlefield will be visited. The party will return to New York on May 3.

#### Hardware Jobbing Combine.

It is announced that Mr. E. C. Simmons of the Simmons Hardware Co. of St. Louis is to be president of a consolidation of hardware jobbing interests of the country, capitalized at \$120,000,000, which will have its general headquarters for buying and selling and transporting goods at St. Louis. Mr. W. D. Simmons, who is to be the chairman of the executive committee, is quoted by the St. Louis Republic as follows:

"Many economies can be practiced which the public will ultimately get the benefit of. Well-assorted stocks will be kept at all great distributing centers on which the local dealers may draw frequently, and by means of which they will be enabled to carry a larger assortment, do a larger business and make more money with the same investment of capital and labor.

"There is to be no attempt at monopoly or dictation and no intention of destroying competition. We go into it with the idea of being better able to serve the trade satisfactorily and assisting the small retail merchant to meet competition, no matter how large the competitor. Some sixty houses are already in, including most of the larger and more important ones.

"In a few words, this joining of interests, which partakes in no way of the nature of a trust, is made to enable us to better serve the trade and help to hold it within healthy lines."

#### Saltpetre in Texas.

State Land Agent O. L. Slaton has reported to State Land Commissioner Charles Rogan of Texas upon the discovery of saltpetre in El Paso county. He writes: "No work of any consequence has yet been done, only the slightest prospecting, consisting of very shallow digging and breaking of rocks. Copper, lead and silver are shown from the assays, copper predominating. The cave is on one of the claims on or near the top of the mountain, where a large lime rock about forty feet in diameter juts out, and the door of the cave is in this rock. Inside is a chamber about fifteen to twenty feet square and fifteen feet high, walls very rough, with small holes admitting light from above. The inner walls are very seamy and porous, and saltpetre appears in most of the seams and pockets, and also at the bottom of the cave. It is said to be caused by animal deposits, but I cannot agree to this, as there is no evidence of bats in this cave, and there is no place for them above or near it. The quantity seems to be very limited. As no work has yet been done here, I cannot tell if it comes from below, but that is the only way I can account for it."

Messrs. Cerra & Cerra of Gijon, Spain, who are interested in the importation of American manufactures into Spain, write to the Manufacturers' Record that railways have been in course of construction in Spain at various places during the past two years, and for all of them the material has been supplied by firms in England, Germany, Belgium and France, with the single exception of the firm of Cerra & Cerra, who supplied the material from North America.

The Houston Cotton Exchange has elected Mr. William D. Cleveland, president; George W. Neville, vice-president, and W. B. Chew, treasurer.

## FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

#### America and the Levant.

German iron circles look upon the direct freight service which has been inaugurated by the Hamburg-American and Levante lines between New York and Constantinople with misgivings, reports United States Consul-General Richard Guenther at Frankfurt. He adds that it is taken for granted that the United States will at once improve the opportunity and enter into lively competition with German trade in the Orient. The central organ of the German rolling mills expresses surprise that a German steamship line should have been ready to inaugurate an enterprise opposed to the interests of German industries. A mitigating reason for the Levante Line, it is said, may be found in the fact that it has operated without profit for seven years, and is therefore compelled to take hold of every opportunity to increase its revenues. Nevertheless, the paper claims, Germans have a right to expect that the new line will adopt freight rates compatible with the interests of the German export industry, so that the greatest damage will at least be avoided. This expectation, the paper states, is also shared in government circles.

#### Swiss Using American Looms.

Mr. George Gifford, United States consul at Basle, writes that among the American exportations of the coils-to-Newcastle kind may be mentioned the recent rather large shipments of ribbon looms to Switzerland. Even the men who buy them express surprise at finding themselves using an imported article in place of one which for generations has been manufactured here. These looms are much more expensive than those made in Switzerland, even leaving freight and duties out of account, but manufacturers find it profitable to use them because of their greater solidity of construction and the much larger amount of work they do. If it were not for the difficulty of readily adjusting them for the production of different widths and kinds of tissue, they would no doubt soon displace all other looms for weaving plain ribbons. But they are built to produce only one article, or a small number of articles of a particular kind on a large scale, after the American fashion.

#### Chances in Belgium.

Mr. Alfred A. Winslow, United States consul at Liege, reports that the time is now ripe for a general move from America for the markets of that part of Belgium. He says:

"Business is improving, and the people are friendly toward American goods, and readily recognize their merits. I believe an active campaign by a few up-to-date salesmen would be the means of greatly increasing our sales here. In no line is this more apparent than that of machinery. Manufacturers have realized that they must have modern machinery and tools in order to keep pace with their foreign competitors, and now that the trade outlook is brighter, they are casting about for installations of the latest and best. Not only good salesmen to sell the machinery are needed, but competent American workmen to superintend its placing and operation. During the past year substantial progress has been made along all lines at Liege, but there is still room for more."



## RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

## CHOCTAW SYSTEM SOLD.

Chicago, Rock Island & Pacific Reported to Have Bought It.

Formal announcement of the sale of the Choctaw, Oklahoma & Gulf Railroad to Speyer & Co., bankers, of New York, has been made at Philadelphia, where the principal office of the company is situated. It was reported that the road had been purchased to be turned over to the Chicago, Rock Island & Pacific Railway Co. President Francis I. Gowen of the Choctaw is quoted as saying that the transfer of the property would mean a revolution in its management, but that he was not in a position to speak in detail upon the subject. The sale price, according to the announcement, was \$80 for the common stock and \$60 for the preferred stock, both ex-April dividend.

The Choctaw, Oklahoma & Gulf has a main line 760 miles long, extending from Memphis, Tenn., to Amarillo, Texas. It also owns a line fifty-seven miles long from Little Rock to Hot Springs. It leases and operates the White & Black River Valley Railway, sixty miles long, and also has the Ardmore branch, which is about completed, 116 miles in length. Other branches owned or operated and extensions projected bring the total mileage of the system up to 1780 miles. Originally the Choctaw, Oklahoma & Gulf was a short coal road in the Indian Territory, but it purchased the Little Rock & Memphis line, and has for several years been rapidly expanding. The sale, it is stated, involves the payment of more than \$21,000,000.

Included in the deal is a proposition to purchase the Choctaw Northern Railroad, which is controlled by the Choctaw, Oklahoma & Gulf, to which it is an important feeder. The Choctaw & Northern extends from Geary to Alva, in Oklahoma, a distance of 104 miles, with a branch thirty-three miles long to Anthony, Kan. Dispatches report that surveys are being made for a branch of the Choctaw from McLish to Denison, Texas, thirty-five miles, and from Hewitt, I. T., to Lawton, the latter extension touching the Rock Island at Comanche, I. T.

Credence was given to the report that the Rock Island is the real purchaser of the Choctaw, because about a month ago Chas. H. Warren, then vice-president of the Central Railroad of New Jersey, but now, it is stated, assistant to the president of the Chicago, Rock Island & Pacific, went to Little Rock, Ark., where the general offices of the Choctaw are situated, and made a thorough inspection of its property, going over the line for that purpose. Furthermore, the value of the Choctaw to the Rock Island is made apparent by the fact that a short extension of a comparatively few miles would connect it with the Rock Island's new line to El Paso, and thus give the greater system a direct route eastward to Memphis.

Subsequently it was announced in New York that the Chicago, Rock Island & Pacific would issue \$24,000,000 of 4 per cent. bonds to pay for the Choctaw stock purchased by Speyer & Co.

## New Line in Arkansas.

Mr. J. Ernest Jarratt of Jarratt & Son, manufacturers of staves, headings and doors, etc., at Marianna, Ark., writes to the Manufacturers' Record as follows:

"The engineering corps of the St. Louis & Iron Mountain Railroad is pushing the survey for the proposed line from Memphis to Marianna. The Memphis, Arkau-

sas & Texas Railroad Co. made a survey through this same section several years ago, located the line and secured the right of way. The feasibility of the route makes it almost certain that one or the other of the companies will build the road, and perhaps at an early date.

"It is reported that a railroad will be built from Brinkley to Marianna. Preliminary survey has been made. A final survey to establish the line is to be made very soon. The projected road will open up a splendid farming country and pass through a well-timbered region. Connection at Brinkley will be made with the Choctaw and the Cotton Belt railroads."

The line from Marianna to Memphis will be about fifty miles long, and that from Marianna to Brinkley, in a direction almost opposite to the other, would be about twenty-five miles long.

## Atlanta's Union-Depot Plan.

Plans for the proposed new union-station building in Atlanta have been prepared by Bradford L. Gilbert, the architect in charge, and have been approved by Governor Chandler of Georgia and President J. W. Thomas of the Nashville, Chattanooga & St. Louis Railroad Co., lessee of the Western & Atlantic Railroad. They are now to be submitted to the other railroads interested for their approval.

The plans provide for a station with thirteen tracks, nine of which would be through tracks and four would be spur or short tracks. It is understood that the plan does not contemplate the closing of any streets, also that the tracks are to be elevated, and that the depot will be so arranged that passengers will not have to cross tracks in going to or from trains. As soon as the plans are finally approved they are to be made public in full.

## Wadesboro to Winston.

Representatives of the Winston-Salem (N. C.) Chamber of Commerce recently appeared before a special committee and a number of members of the Charleston (S. C.) Chamber of Commerce advocating the construction of the proposed Wadesboro & Winston Railroad, which would give a direct route from Charleston via the Atlantic Coast Line or the Norfolk & Western railroads to coal lands in Virginia and West Virginia. It was stated that the financial plan of the proposed construction was well advanced. The distance from Wadesboro to Winston-Salem in a direct line is about seventy-five miles, and a line so constructed would run through Anson, Stanley, Davidson and Forsyth counties, in North Carolina. It might also touch Rowan county.

## A Virginia Project.

The Charlotte, Farmville & James River Valley Railway Co., recently chartered by the Virginia legislature, is to build a line about eighty miles long from Farmville southwest to Danville, Va., connecting Smithville, Houston, South Boston, Danville and intermediate points. The line would run through Prince Edward, Charlotte, Halifax and Pittsylvania counties. It is proposed to construct, from a point on the line between Farmville and Smithville, a branch to connect with the Southern Railway either at Drake's Branch or Keysville.

## Norfolk to Cape Henry.

The Chesapeake Transit Co., which is to build a steam and electric railway sixteen miles long from Norfolk to Cape Henry, Va., has begun laying track, according to a dispatch from Norfolk. A bridge 2100 feet long is to be built across the Lynnhaven river, and a deep-water terminal is to be established at Lynnhaven.

The company, it is understood, owns five miles of water-front at Cape Henry, and that property is to be improved. Much of the line has been graded, and it is expected that cars will be running by June 1.

## Tallulah Falls Extension.

Mr. J. H. Hicks writes to the Manufacturers' Record from Clarksville, Ga., as follows: "Work has commenced on the extension of the Tallulah Falls Railway from Tallulah to Franklin, N. C., and the contract for the first five miles will soon be completed. When this road is finished it will be a great improvement to the country, and it will run through the last hardwood sections of the State." The Tallulah Railway extends from Tallulah Falls, Ga., to Cornelia, twenty-one miles, and connects with the Southern Railway.

## Macon's Station Movement.

The mayor and aldermen of Macon, Ga., have unanimously adopted resolutions requesting the Southern, the Macon & Birmingham and the Macon, Dublin & Savannah railway companies to make some arrangement with the Central of Georgia Railway Co. to use its enlarged station and to abandon their present stations in that city, the object being to secure a union station, and also to afford travelers an entrance at a more favorable location in the city.

## A New Electric Line.

The Graham, Burlington & River Falls Street Railway Co. has been incorporated in North Carolina to build and operate an electric railroad from the western limit of Burlington through Graham, thence to River Falls and other places in Alamance county. The headquarters of the company are to be at Graham, and the incorporators are J. W. Menefee, J. A. Long and J. C. Simmons. The company has \$100,000 capital.

## Railroad Notes.

The elevated line of the Louisville & Nashville Railway over the town of Henderson, Ky., has been completed and placed in operation.

The Arkansas & Choctaw road will, it is reported, soon award a contract for building a line from the Red river to Wichita Falls, Texas.

The report of the Tennessee Car Service Association for March shows that 1800 cars were handled during the month, an increase over the corresponding month of last year.

A dispatch reports that the St. Louis & San Francisco Railroad has acquired control of the Arkansas Valley & Western and will probably extend it from Sapulpa, I. T., to Enid, Okla.

A circular from the office of General Manager J. A. Edson announces that Mr. B. F. Dickson has been appointed engineer of maintenance of way of the Kansas City Southern Railway Co.

Plans have been completed for a new machine-shop building for the Missouri, Kansas & Texas Railway at Smithville, Texas. It will be 250x260 feet, and will be constructed of brick and stone.

The electric street railway line at Beaumont, Texas, will soon be completed, according to advices from that town. The cars have been built and it is expected that a portion of the road will soon be in operation.

Governor William A. Stone of Pennsylvania informs the Manufacturers' Record that there is no truth in the report that he is interested in a railway or in coal or timber lands on Big Brush creek in Kentucky.

The Missouri, Kansas & Texas Railway Co., according to a dispatch from Joplin, Mo., will have the Joplin extension completed very soon, and will thus be enabled to compete for the business of the zinc-mining district.

Fifteen miles of track have been laid on the Suwannee & San Pedro Railway from Mayo towards Perry, Fla., which is to be the terminus of the line. The road crosses the Suwannee river about four miles below Luraville, Fla.

A dispatch from Huntsville, Ala., says that the charter has been signed and all necessary money is in hand for the building of the proposed trunk-line railroad in Kentucky, Tennessee and Alabama. R. E. Pettus and others are interested.

The extension of the Hagerstown (Md.) Electric Railway to Boonsboro has been completed as far as Beaver Creek, and it is expected it will soon be finished to Boonsboro. Surveys are being made to continue the line over the mountain to Myersville.

A railroad two miles in length has been built from Savage Station, on the Baltimore & Ohio Railroad in Howard county, Maryland, to the Maryland Granite Co.'s quarries at Guilford. The granite company is erecting a hotel near its quarry, and also a general store.

Among the orders reported for the American Locomotive Co. are the following: Southern Railway, 30 engines; Chesapeake & Ohio, 25 consolidation and 5 passenger engines; St. Louis & San Francisco, 10 consolidation engines; Gulf & Ship Island Railroad, 6 engines.

The St. Louis & San Francisco Railroad has, according to a dispatch from St. Louis, ordered the purchase of about \$2,000,000 worth of new equipment, including 53 locomotives, 700 coal cars, 700 box cars, 150 flat cars, 45 cabooses and 9 combination baggage and express cars.

The Oklahoma & Texas Southern Railway is preparing to build ten and one-half miles of line between the Missouri, Kansas & Texas Railroad and Montague, Texas. It also proposes to construct fifteen miles of track southward to the Fort Worth & Denver Railroad at Sunset, Texas.

At the semi-annual meeting of the North British Railway Co., recently held at Edinburgh, the influence of American railway practice upon lines in Great Britain was shown. It was stated that the company was building larger engines and larger freight cars, 1500 of the latter being ordered.

By the recent annual revision of the wage scale on the Baltimore & Ohio Railroad engineers and conductors are to get an advance of from \$8 to \$12 a month, and the wages of other trainmen have been slightly raised. The wages of firemen on heavy engines have been increased from \$2.20 to \$2.30 a day.

The St. Louis Southwestern Railway will, it is understood, remove its offices from Tyler, Texas, to Texarkana. It is announced that the line will be extended from Lufkin to Orange by way of Beaumont, a distance of about 115 miles, it being about ninety-five miles in an air line from Lufkin to Beaumont and twenty miles from Beaumont to Orange.

A dispatch from Houston, Texas, announces the completion of the International & Great Northern's line from Bryan to Waco and the beginning of work on the line from Waco northward to Fort Worth. The road from Bryan southeast to Houston is to be completed as rapidly as possible this summer, so as to give a direct line connecting Galveston, Houston, Waco and Fort Worth.

## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

### A SUGGESTED COMBINE.

#### Proposition Before Southern Yarn Spinners.

Cotton-yarn manufacturers of the South have under consideration a proposition from New York for the organization of a company with \$60,000,000 capital, into which shall be combined the cotton-yarn mills of the South, and it is expected that definite action may be taken at a meeting at Charlotte next week. The Manufacturers' Record is informed that from present indications the final outcome of the proposition is problematical.

The proposition which came from Mr. F. L. Underwood of New York is as follows: "I have the following proposal to make for the purchase of your property. I will form, or cause to be formed, a company under the laws of the State of New Jersey, with power and sufficient capital to take over all the mills engaged in the manufacture of cotton yarns in the Southern States, with 7 per cent. cumulative preferred stock of say \$30,000,000 and common stock of a like amount.

"For your lands and complete plant, including stores or store rights owned and run by the mill company, or owned and run by some employee thereof, trademarks, trade-names, rights, good-will, etc., this company will pay such a sum as shall be named by a committee to be selected by the mill-owners with my approval, such price to be not in excess of 220 per cent. of the fair cash cost of replacing this property, as certified by the aforesaid committee of the mill-owners. Payment shall be made to you for your property, one-half in each of the preferred and common stocks of the company formed for the purchase of the cotton-yarn mills. All indebtedness of your company is to be paid and discharged, or provision made out of the purchase price for said payment and discharge.

"Said company shall take over and pay for in cash as per inventory all stocks of cotton or cotton in process of manufacture, goods on hand, stocks of goods in stores, and all quick assets, except cash on hand, and accounts and bills receivable, 50 per cent. of this inventory to be paid upon the conveyance of the mill property, and the remaining 50 per cent. or the amount found to be due upon verification of the inventory by the directors of the company.

"Said company shall have of its total preferred capital stock issued for cash and plants not less than 20 per cent. in cash, or in stocks of cotton, goods, stores, supplies, etc., for which capital stock shall be issued as for the plants. Upon the signification by the owners of 60 per cent. of the plants engaged in this business that this proposal will be acceptable to them, I will have prepared and submitted to your officers for execution a contract definite in form, covering the transaction hereby proposed. It is a part of this proposal that the loading of the new company for fees, commissions, expenses and charges of all kinds shall be between 5 and 12½ per cent. of the total issued capital, to be paid in stocks of the company in the same proportion that they are issued for cash and plants. It is understood

that there will be no charges of any kind to be made or deducted from the price herein named to be paid to you."

Representatives of 300,000 spindles appointed a committee of five to consider the proposition, and the committee has suggested its serious consideration and a report on it on April 23. A leading Southern spinner, in a letter to the Manufacturers' Record, says:

"It is a proposition that requires mature reflection, and while it is very plausible on its face, I see many difficulties in the way. It seems to me it contemplates all corporations losing their identity and all being merged into one corporation, managed by one head and one board of directors. This, it seems to me, would put many men out of business."

#### Complete Cotton Plant at Pell City.

Our issue of last week mentioned the incorporation of the Pell City Manufacturing Co. of Pell City, Ala., for cotton manufacturing and other purposes. Further details regarding the enterprise have been submitted to the Manufacturers' Record by those interested, and it is seen that a complete establishment for manufacturing the various products of the cotton plant will be built. This fact emphasizes the tendency towards the construction of plants to work up the staple into its every available product. A main building, 150x500 feet, three stories high, will be erected to accommodate the textile machinery, which will include 12,000 spindles and complement of looms for the production of denims. Building for cotton ginning and cottonseed-oil machinery will also be erected, and these departments will be equipped. Surveys have been made for the site by Ramsay-Reilly Engineering Co. of Birmingham, Ala., and the construction work is expected to begin by May 1. Boston (Mass.) architects are preparing the plans. The completed plant will consume 12,000 bales of cotton annually, employing about 750 operatives. As previously stated, New England investors are interested, among them being C. E. Riley of Boston, Mass. Company's capitalization is \$500,000, and George W. Pratt, 427 Prudential Building, Atlanta, Ga., is president.

#### Coosa Mfg. Co.'s Additional Mill.

Announcement was made in the Manufacturers' Record of April 3 that the Coosa Manufacturing Co. of Piedmont, Ala., had determined to build an additional mill for spinning fine yarns, the probable investment to be about \$100,000. Mr. A. G. Thatcher of Wilmington, Del., president of company, writes the Manufacturers' Record giving further and full details as to the new plant. He states that architects are now preparing plans for the building, which is to be two stories high, 102x190 feet in dimension, and that contracts have been placed for the 10,000 to 11,000 spindles that will be installed. The product will be warp yarns, 40s to 60s, from long-staple cotton, either American or Egyptian, and yarns as fine as 80s will be made, if required, from the same machinery. Messrs. Platt Bros. & Co. of Oldham, England, through their agent, E. A. Leigh of Boston, Mass., will furnish the card-room machinery; Howard & Bullough American Machine Co. of Pawtucket, R. I., will furnish the spinning and twisting frames, and Easton-Burnham Company of Pawtucket, R. I., will furnish the spooling machinery. The power plant has not been ordered, but about 400 horsepower will be required to operate the equipment. Construction work will begin by May 1, and the plant, when completed, will employ about eighty operatives.

#### To Establish Finishing Plants.

An announcement of considerable importance to Southern textile-manufacturing interests was made during the week. It comprised the news that the Union Bleaching & Finishing Co. has been incorporated (under New Jersey laws), with capital stock of \$2,500,000, for the purpose of establishing in the South plants for bleaching, printing, dyeing and otherwise finishing cotton goods. The first plant will be located at Fayetteville, N. C., and preparations are now being made to begin its construction. This announcement, following soon after the recent beginning of work on a \$200,000 finishing plant at another mill town in North Carolina, is indicative of a movement towards finishing all Southern cotton goods at the mill. This will promote economies in marketing, as opposed to the expense entailed in sending goods to Northern and Eastern finishers. The formation of the Union Company has resulted largely from the efforts of W. M. Morgan, a well-known cotton manufacturer of Fayetteville. Company's president is James B. Duggan of Utica, N. Y.; vice-president, B. N. Duke of Durham, N. C.; directors, Messrs. J. B. Duke, Anthony N. Brady and Thos. F. Ryan of New York city, Samuel A. Beardsley, James B. Duggan, B. N. Duke and W. A. Erwin of Durham, N. C.

#### To Add \$62,500 Weaving Mill.

A meeting of the stockholders of the Kessler Manufacturing Co. of Salisbury, N. C., was held last week. The report of the management showed that the plant has continued to operate on full time, and profitably. In view of conditions the company decided to erect buildings and install sufficient looms to weave into cloth the product of the 11,232 spindles now in position. A fund of \$62,500 will be available for the addition, and capital will be increased from \$125,000 to \$187,500 to provide the fund. J. W. Cannon of Concord, N. C., is president, and to him is left the decision as to number of looms, character of product and other details. The No. 2 mill will have 300 looms for print cloths, and S. W. Cramer of Charlotte, N. C., is the engineer in charge of construction.

#### The Cotton Movement.

In his report for April 11 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 223 days of the present season is 9,416,642 bales, an increase over the same period last year of 325,602 bales. The amount of crop in sight for 1900-1901 on April 11, 1901, was \$7.55 per cent. of the total. If the same percentage persists this year the total crop would amount to 10,760,000 bales. The exports this season have been 5,697,276 bales, an increase of 496,302 bales; takings by Northern spinners, 1,835,741 bales, an increase of 164,047 bales; by Southern spinners, 1,219,777 bales, an increase of 148,268 bales.

#### A \$35,000 Knitting Mill.

Mention was made recently of the efforts of the Business Men's League at Waco, Texas, to establish a knitting mill. The Waco Knitting Mills Co. has now been organized to build and equip the plant and will incorporate with capital of \$35,000. Machinery will be ordered at once for daily production of 200 knit underwear garments, about 200 people to be employed. The directors are Messrs. M. L. Garrett (president), J. T. Tyler (secretary-manager), Geo. E. Knowles (superintendent), L. C. Peury, W. C. Talbert and W. H. Hoffman.

#### Textile Notes.

Leading business men of Columbus, Miss., are completing plans to organize a company for the establishment of a \$100,000 cotton mill.

It is proposed to organize a cotton-mill company at Aberdeen, Miss., and over \$85,000 has been subscribed. A \$250,000 plant is contemplated.

Knoxville (Tenn.) Cotton Mills' additional looms, reported last week, will number 200. It has not been fully determined what character of product will be manufactured.

Knoxville (Tenn.) Woolen Mills' improvements, reported last week, include the replacing of old narrow looms with ninety new broad looms for the manufacture of cassimeres.

Great Falls Cotton Mills Co. of Falls City, Tenn., is repairing the damage to its plant caused by the floods of last month, and expects to have the plant in operation in two months. Mill has 4000 ring spindles and 130 looms.

H. M. Shaw and associates of Oxford, N. C., contemplate the establishment of a knitting-mill, and Mr. Shaw invites correspondence relative to the cost of equipment, selection of character of product, and other information.

Messrs. H. F. Douglass, B. F. Hamilton, H. G. Beard, Columbus Lytal and F. P. Stearns have incorporated the Shawnee Cotton Textile Co. of Shawnee, O. T., for manufacturing cotton products. The capital stock is \$100,000.

The Board of Trade of La Grange, Texas, is endeavoring to organize a company for the purpose of building a cotton factory. Messrs. John Killough and Alex. Rosenberg have been appointed a committee to visit mills in the State and report on the feasibility of the project.

Brenham Cotton Mills of Brenham, Texas, will build a mill to have equipment of 5000 spindles and 160 looms for the production of the coarser grades of cloth. This company was reported last week as organized, with capital of \$150,000. D. C. Giddings, Jr., can be addressed for particulars.

Drayton Mills of Spartanburg, S. C., has filed application for charter, capital stock being placed at \$250,000. Books of subscription are now open, and the stock is being rapidly taken by local investors, some of whom are officers of other cotton factories. Arch B. Calvert, mentioned recently as proposing an enterprise of this character, is the promoter. Incorporators are Mr. Calvert, M. F. Floyd, W. A. Law, John B. Cleveland, W. E. Burnett and A. L. White.

#### QUOTATIONS OF COTTON YARNS.

By Buckingham & Paulson, New York, Philadelphia and Chicago, April 15.

April 19.		
No. 10s-1 and 12s-1 warps.....	14	61/4
No. 14s-1 warps.....	15	61 15/16
No. 16s-1 warps.....	15	61 15/16
No. 18s-1 warps.....	16	61 15/16
No. 22s-1 warps.....	16	61 15/16
No. 26s-1 warps.....	16 1/2	61 15/16
No. 6s to 10s bunch yarn.....	13 3/4	61 1/4
No. 12s-1.....	14 1/2	61 1/4
No. 14s-1.....	14 1/2	61 15/16
No. 16s-1.....	15	61 15/16
No. 18s-1.....	15 1/2	61 15/16
No. 20s-1.....	15 1/2	61 15/16
No. 22s-1.....	16	61 15/16
No. 24s-1.....	16 1/2	61 15/16
No. 8s-2 ply soft yarn.....	14 1/2	61 1/2
No. 10s-2 ply soft yarn.....	15	61 1/2
No. 8s-2 ply hard.....	14	61 1/2
No. 10s-2 ply hard.....	14 1/2	61 1/2
No. 12s-2 ply hard.....	15	61 1/2
No. 14s-2 ply.....	15 1/2	61 1/2
No. 16s-2 ply.....	15 1/2	61 1/2
No. 24s-2 ply.....	17	61 1/2
No. 26s-2 ply.....	17 1/2	61 1/2
No. 30s-2 ply yarn.....	18	61 1/2
No. 40s-2 ply.....	22 1/2	61 1/2
No. 8s-3, 4 and 5 ply.....	14	61 1/2
No. 30s-2 ply chain warps.....	16 1/2	61 1/2
No. 24s-2 ply chain warps.....	17 1/2	61 1/2
No. 26s-2 ply chain warps.....	17 1/2	61 1/2
No. 30s-2 ply chain warps.....	17 1/2	61 1/2
No. 16s-3 ply hard twist.....	15 1/2	61 1/2
No. 20s-3 ply hard twist.....	16	61 1/2
No. 26s-3 ply hard twist.....	17 1/2	61 1/2



## COTTONSEED OIL.

This department is open to the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

### Cottonseed-Oil Notes.

The Autauga Oil & Fertilizer Co. has been organized at Prattville, Ala., with a capital of \$50,000. The company will equip a plant to manufacture cottonseed oil and fertilizers.

It is stated by the management of the Georgia Cotton Oil Co. at Albany, Ga., that improvements aggregating \$15,000 will be made in the plant at that place before the next cotton season.

It is stated that the Southern Cotton Oil Co. closed a deal last week for a site for a cotton-oil factory at Pensacola, Fla., and will at an early date erect a large factory building near the cotton compress in that city.

The Itabena Cotton Oil Co., located at Itabena, Miss., was incorporated on the 10th inst., with a capital stock of \$75,000. The officers of the company are P. Cohen, president; J. L. Haley, vice-president; J. H. Godsey, secretary and treasurer, and J. M. Phillips, general manager.

The Charlotte (N. C.) Cottonseed Oil Co. has, it is understood, about completed the purchase of eighty-three acres of water-front property on Paradise creek, near Portsmouth, Va. The company intends to erect upon the property a plant for the manufacture of cottonseed oil and by-products of cottonseed.

The directors of the Commerce Oil Mill Co. of Commerce, Texas, met and organized by electing the following officers: W. J. Taylor, president; S. B. Jackson, vice-president; W. A. Marclay, secretary. An assessment of 25 per cent. of the stock was called for. It is the intention of the company to have the mill in operation for the approaching season.

After a thorough survey of the field the stockholders of the Progressive Oil Mill & Fertilizer Co. and the Brookhaven Cotton Oil Co. of Brookhaven, Miss., have decided to consolidate their interests and establish only one cottonseed-oil mill at that place instead of two. The new company is to be known as the Brookhaven Progressive Cotton Oil Co., with a capital stock of \$60,000. E. H. Easterling is president and Louis Cohn, vice-president, and David Cohn secretary and treasurer.

Cottonseed products in Texas were firmer last week. Both on crude and yellow oil there was an advance of one-half a cent. Linters were also stronger. The market for cottonseed meal has broken about \$2, due to the fact that very little or none of the Texas product is to be had and the offerings made on supplies shipped from other States. Cottonseed oil, crude, loose, was quoted at 34½ to 35 cents, and summer yellow oil at 37½ to 38 cents; linters, 2¼ to 2½ cents, all f. o. b. mills at interior points in the State; hulls, loose, \$8 per ton; cottonseed meal, \$24.50, and cottonseed cake, \$24, f. o. b. Galveston.

The following are the official quotations of cotton and cottonseed products as posted at the New Orleans Cotton Exchange on the 14th inst.: Prime refined oil in barrels, per gallon, 41 cents; off refined oil in barrels, per gallon, 40 cents; prime crude oil, loose, per gallon, 35 cents; price cottonseed cake, per ton of 2240 pounds, \$24.50; off cottonseed cake, per ton of 2240 pounds, \$26¼; prime cottonseed meal, per ton of 2240 pounds, \$26¼; soap stock, per barrel, \$1.25; linters—A, per pound, 3½ cents; B, 3¼ cents; C, 2½ cents; cottonseed in sacks delivered at New Orleans, per ton of 2000 pounds, \$16;

in bulk delivered at New Orleans, per ton of 2000 pounds, \$15.

Since the 1st of January ten new cotton-oil mills, with an aggregate capital stock of nearly \$1,500,000, have been organized in Mississippi. All these mills are expected to be ready to operate when the fall season opens. The mills are located at Itabena, Pickens, Como, Jackson, Clarksdale, Brookhaven, Carrollton, Grenada, Greenwood and Lexington. Fully a dozen other towns are discussing oil-mill propositions, and in nearly every instance home capital is behind the enterprises. The census industrial bulletin for 1900 showed that during the previous ten-year period Mississippi made a gain of 177.6 per cent. in the value of products manufactured from cottonseed. The growth now being enjoyed by the industry is the most prosperous in the history of the State.

### Possibilities of Mobile.

Mr. C. F. Z. Caracristi, the well-known mining engineer, has written an open letter to the Chamber of Commerce of Mobile, in which he elaborates the advantages of Mobile as a port and connected therewith as a manufacturing center. He says that the growing commercial importance of the city will force it to become a great manufacturer. He finds no reason why the hides which are shipped to that city from the Latin Americas should not be worked into leather products, or why cotton goods, woollens, pottery, cheap firearms, soaps, tinware and other articles should not be made for sale in the West Indies and in South and Central America. He finds in Southern Alabama immense possibilities for rice-growing and viticulture, and he adds:

"I cannot speak too favorably of the possibilities of the inexhaustible marl, cement rock and clay used in the manufacture of Portland cement, for which there is a demand of over 1,500,000 barrels in Latin America per year, to say nothing of the home consumption, all of which could be supplied from the deposits of the Gulf plateau of Alabama, where natural gas, petroleum and lignite are to be found in sufficient quantity to burn the cement at a less cost than at any other place in the United States. Salt brine of commercial quality and great quantity also saturates the lower formation, while golden ochre, pottery clay and fertilizing marls are found in profusion. Such are the mineral advantages that are destined to kindle a brighter glow of progressive prosperity of Mobile; but the whole story cannot be told in a few words, and nothing short of a personal investigation can give a fair conception of the vast possibilities of this important section of the great South."

### To Irrigate Rice Lands.

Charter has been filed by the Calcasieu & Mermentau Canal Co., with capital stock of \$25,000, for the construction of an irrigation canal. The canal will connect the Calcasieu and Mermentau rivers, and by taking advantage of natural water-courses its length will be reduced to ten miles. This canal will reclaim thousands of acres of overflowed lands and enable the rice-growers to send their product to market at cheaper rates. L. Kaufman is president; J. A. Bell, vice-president; H. B. Milligan, secretary, and H. C. Drew, treasurer, all of Lake Charles, La.

Sales in the Joplin (Mo.) district during the week ended April 12 were 9,427,610 pounds of zinc ore and 1,551,210 pounds of lead ore, valued in all at \$167,769.

The carriage and wagon makers of the South will have a convention at Charleston on May 6, 7, 8, 9.

## PHOSPHATES.

### Phosphate Markets.

Office Manufacturers' Record, Baltimore, Md., April 16.

Phosphate rock in the local market continues to rule very steady for all grades. Receipts continue light, and fertilizer factories are not in the market to any urgent extent. From Southern sources the advices continue unchanged, the situation being in most cases satisfactory. The market in South Carolina is quiet and steady. Deliveries from the Coosaw works at Beaufort were made during the week. The Florida market is in good shape, and values firm, especially for pebble. Companies of prominence in the pebble district are firm holders, and refuse to sell except at their own figures. Land rock is going out in considerable quantities from the ports, and in Europe prices for Florida hard rock are quoted firm at 6¼d. to 7d. per unit c. a. f. In the Mt. Pleasant section in Tennessee the movement is very satisfactory, and the various companies engaged are preparing for active operations during the spring and summer months. Valuable properties have changed hands during the week, and operators have great confidence in the future of the market. Prices for both domestic and foreign rock are very steady, and last week another large shipment was cleared for Europe from Pensacola. Tennessee rock in Europe is very steady as to value; quotations firm at 5¼d. to 6¼d. per unit for 78 to 82 per cent. rock. The following phosphate charters were reported last week: The Spanish steamer Goyerri, 1934 tons, from Savannah to Rotterdam, phosphate and general cargo at 23/6; British steamer Robinia, 1308 tons, from Ferdinandina to Dublin on private terms; British steamer Yorkmoor, 2287 tons, from the Gulf to United Kingdom or Continent on private terms, and schooner M. B. Seary, 1052 tons, from Port Tampa to Baltimore on private terms.

### Fertilizer Ingredients.

The ammoniate market continues to rule firm, and the distribution is of such a character that prices throughout the list are well maintained. There is a fair inquiry from the East and South. Stocks at primary points are reported light. The North Carolina and Chesapeake bay fisheries are active, and the output large, with prices for scrap firm.

The following table represents the prices current at this date:

Sulphate of ammonia (gas).....	\$2 95 @ 3 00
Nitrate of soda, spot Balto.....	2 30 @ 2 40
Blood .....	2 42½ @ 2 45
Azotine (beef).....	2 40 @ 2 45
Azotine (pork).....	2 40 @ 2 45
Tankage (concentrated).....	2 25 @ 2 27½
Tankage (9 and 20).....	2 35 & 10¢ @ 2 37½ & 10
Tankage (7 and 30).....	21 00 @ 22 00
Fish (dry).....	27 50 @ 30 00

### Phosphate and Fertilizer Notes.

The steamer S. T. Morgan was at Beaufort, S. C., last week loading the last of the phosphate rock in the yard of the Coosaw Company's works.

The steamship Buckminster for Bremen and Stettin cleared last week from Savannah, Ga., with 1649 tons of high-grade Florida phosphate rock for the latter port.

The Gulf Transit Co. of Pensacola cleared the steamship Manchester Importer last week from Pensacola, having among her cargo 2193 tons of Tennessee phosphate rock for Manchester, England.

The Federal Chemical Co., which recently bought twenty acres of land in Nashville, Tenn., on which to build a fertilizer plant, has awarded contracts for the two main buildings, and will now push the work to rapid completion. The

fertilizer building will be 180x40, and the acid building 300x80 feet. It is expected that the entire plant will be in operation about the 1st of October.

The extensive new fish-oil and soap factory at Old Brunswick on the Cape Fear river, the property of the Cape Fear Fisheries, is about completed and ready to commence operations. Seven steamers are now fishing for the company.

The Providence Drug Co. (Limited) of Lake Providence, La., has been chartered with a capital stock of \$50,000. The officers of the company are as follows: Dr. W. B. Pierre, president; J. G. Pittman, vice-president; W. D. Brown, secretary and treasurer, and Dr. J. E. Brown, manager.

It is reported that the Southern Pharmaceutical & Chemical Co. of Louisville, Ky., was sold last week to J. D. Baldwin and W. E. Turner, two St. Louis drug manufacturers and capitalists. The stockholders and directors of the company at a meeting confirmed the action of the officers in selling the plant. The purchasers will begin operations at the plant as soon as arrangements can be made.

It was reported last week in Columbia, Tenn., that the Howard & Ridley Phosphate Co. had disposed of its entire interests to the Charleston (S. C.) Mining & Mineral Co. for the sum of \$425,000. The companies are two of the five largest interested in the Tennessee phosphate field. It is stated that immediate possession will be given to the Charleston Mining & Mineral Co., which is a branch of the Virginia-Carolina Chemical Co. In a letter to the Manufacturers' Record the Virginia-Carolina Chemical Co. states that it has purchased the property of the Howard & Ridley Phosphate Co. at Mt. Pleasant, Tenn., and expects to operate the same.

### Marble in Tennessee.

Editor Manufacturers' Record:

Within a radius of about thirty miles of this city there is to be found inexhaustible deposits of the best marble in the world. The United States government has made exhaustive tests of all available foreign and domestic marbles for its own use and found that this marble sustained the highest crushing strain and absorbs less moisture than any other, the latter feature making it less susceptible to stain, and therefore most desirable for interior decorations as well as other purposes.

The different deposits contain dark variegated, gray white, and the most delicate tints of red and pink.

Architects and builders are fast becoming acquainted with the superior qualities of this marble, and notwithstanding the fact that the price, which has ranged for several years past at seventy-five cents to ninety cents per cubic foot for rough blocks on cars here, has been advanced within the past year to \$1.50 per foot, the demand is far in excess of the output. It is rumored that present operators are discussing the advisability of organizing to divide the expense of buying up all accessible properties not yet in operation, as each one already has more territory than he can exhaust in this and the next generation.

To give an idea of the great future that awaits this industry, our operators have not yet made one effort to export, and in fact only produce about one foot for consumption in this country to where there are ten of Italian marble used.

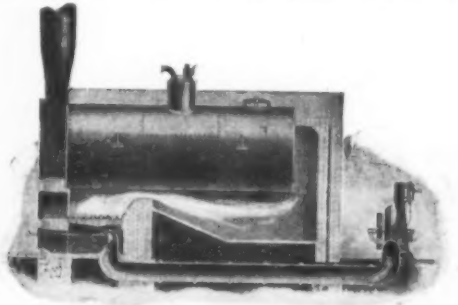
The Tennessee marble business has passed the experimental stage, and there are a number of valuable and available properties here which it will pay investors to examine.

E. A. AKERS.  
Knoxville, Tenn.

## MECHANICAL.

### Mechanical Draft.

Of the many different mechanical appliances used for producing artificial draft, the centrifugal fan or blower is said to be the one most generally employed and giving the best results. The two common methods of producing artificial draft on steam boilers by the use of fans are commonly termed forced and in-



FORCED DRAFT.

duced draft. With the former the air for the combustion of fuel is discharged into ash-pit, maintaining a static pressure, which forces the air through the fires and the flue gases out of stack or chimney. With the latter, the flue gases are drawn from the combustion chamber through flues and smoke connections, and discharged into the chimney by an exhaust fan. By drawing the gases from combustion chamber a partial vacuum is produced, and the atmospheric pressure under grates forces the air through the fires.

In general, the advantages of mechanical draft are independence of atmospheric conditions, regulation, adaptability, economy of space, smoke prevention, omission of chimney, portability, cheaper in first cost, smaller operating expense, cheaper fuel, increased combustion, combustion efficiency, utilization of waste gases, smaller boiler plant.

Every one knows that the intensity of natural draft is dependent upon the difference of the temperature in the stack and the temperature of the surrounding air. As these temperatures, and especially that of the atmosphere, are extremely variable, it is readily seen that the draft cannot be constant. In some cases the draft may vary 25 per cent. on account of sudden atmospheric changes. With mechanical draft the intensity of the draft is dependent alone upon the speed of fan, and therefore is uniform, no matter what the atmospheric conditions may be.

For street-railway and electric-light power plants, where the load, and consequently the required steaming capacity of the boilers, is variable, mechanical draft is admirably adapted. The draft can be increased by speeding up the fan, thus increasing steaming capacity of boilers and making it possible to carry heavy overloads, which could not be carried with natural draft.

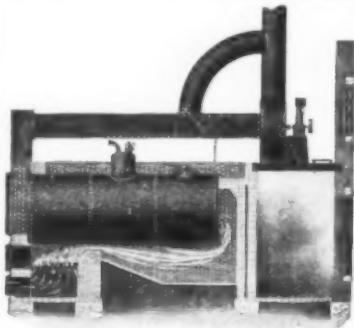
With a chimney the only control of the draft is by dampers, which diminish the volume of air, but do not affect pressure at a given temperature.

One of the great drawbacks with natural draft is that, on account of draft being dependent upon the intensity of the fire, it is least when fire is low, usually the time when the strongest draft is needed. With mechanical draft, by changing the speed of blower the volume of air supplied to the fires and the pressure are simultaneously changed. By placing a regulating valve on the steam pipe of engine driving the blower the draft can be automatically controlled by the steam pressure in boiler. As the steam pressure goes down this valve slowly

opens, admits more steam to engine, and increases the speed, thereby increasing the draft on boiler. If the steam pressure in boiler rises, the action of the valve is just the reverse. This makes it possible to keep steam pressure practically constant without attention to draft regulation.

The blower is very readily adapted to any location and any desired changes or alterations to be made to the steam plant, while a chimney is a fixture. A chimney

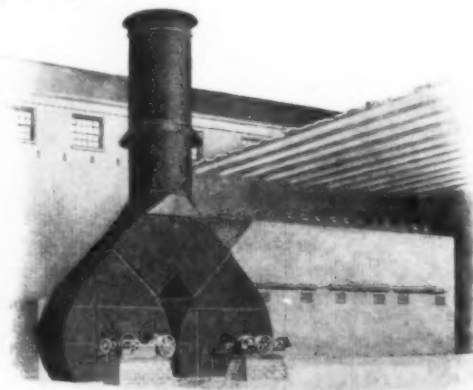
is built on substantial and costly foundation, while a blower can be set on top of boiler, hung from roof or placed in another room. In any case, the cost of foundation for the largest blower and engine is small when compared with the cost of foundation for even a moderate-sized



INDUCED DRAFT.

chimney. This is an important item in cost of installation.

For a temporary plant mechanical draft avoids the necessity of a chimney, and a buyer can easily be found for a second-hand blower. An old chimney is worth practically nothing.



INDUCED-DRAFT PLANT, HARRISBURG STEAM HEAT & POWER CO., HARRISBURG, PA.

An important matter to be considered is the initial cost. This is almost invariably in favor of mechanical draft, and generally the difference in cost is so much that it will pay for installation of economizers. The larger the steam plant the greater the proportionate difference in the cost of a stack and a fan and engine equipment. For a plant of the average type a forced-draft plant with a short stack costs less than 25 per cent. of the cost of a chimney; a single-fan induced-draft plant less than 40 per cent., and a

double-fan induced-draft plant less than 50 per cent. of the cost of an ordinary brick stack. A double-fan system is only used when the service is continuous, one fan being held in reserve while the other is in operation.

Many think that the cost of operation is considerably more with mechanical draft than with natural draft, because after the chimney is built it requires no power to produce draft, while with mechanical draft it is necessary to supply power to operate the fan. The steam required to drive the fan engine is seldom more than 1 per cent. of steaming capacity of boiler plant, and about one-seventy-fifth of the heat required to produce the same draft by a stack. The exhaust from fan engine can be utilized for heating feed water or building. Cheaper fuel can be burned, or more heat extracted from a good quality of coal, thereby lessening consumption for a given output. In many cases this saves more than 40 per cent. in cost of fuel. With a very poor grade of fuel mechanical draft seldom increases the fuel consumption 50 per cent. above consumption with a good quality of coal and natural draft. As these cheap fuels cost less than half as much as a good quality steaming coal, it is seen that a saving of 25 per cent. can be accomplished in most cases.

By installing an economizer the heat which with natural draft would be discharged from stack can be utilized for heating feed water. The actual saving in fuel by an economizer is 10 to 16 per cent., depending upon type and conditions of operation. On account of the necessity of maintaining a high temperature of the flue gases in stack, it is seldom that economizers can be used with natural draft unless the stack is very high. Economizers, being heat abstractors, will lower the temperature of the gases. As the temperature of gases approaches the temperature of the atmosphere the effect of varying atmospheric conditions on the draft is more marked. As stated before, with mechanical draft the temperature of the gases has nothing to do with the intensity of draft, and they may, therefore, be cooled down even to atmospheric temperature, if possible, without diminishing draft.

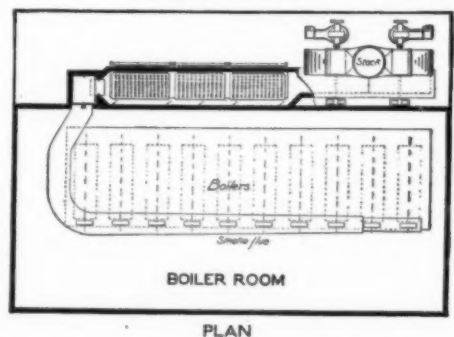
producing the draft. By using a fan or blower it is possible to produce combustion at the rate of 120 pounds of coal per square foot of grate surface, and a rate of forty or fifty pounds is very common.

By increasing combustion greater steaming capacity is obtained, and the horse-power output of boiler plant can be readily increased from 25 to 100 per cent. at a small initial cost by the installation of mechanical draft. The possibility of over-rating the boilers in this way makes it advantageous in many cases to install a smaller boiler plant; this means a smaller boiler-room, less ground space, a smaller investment, and consequently a reduction in the annual fixed expenses.

Where applicable, induced draft is generally preferable to forced draft for the following reasons:

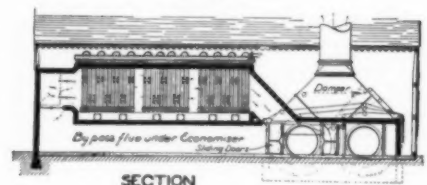
A much more even fire will be obtained, and there is no trouble from holes or patches burning in certain spots, as with forced draft, unless carefully watched. With forced draft, owing to the static pressure it is necessary to maintain in the ash-pit and combustion chamber, gases and ashes are forced out of the fire-doors and ash-pit doors when opened unless the draft has first been shut off. This is avoided in induced draft, as a partial vacuum is maintained in the combustion chamber, and the air naturally flows into boiler instead of the gases being forced out. The ventilating of boiler-room is better, as the air is drawn out of the room instead of filling it with obnoxious gases. Owing to the velocity of the gases through the flues, soot or dirt will not deposit as readily. With induced draft very much larger fuel economizers can be used, as the temperature of the gases can be reduced to a very low point, and very useful heat absorbed without bad effects.

Owing to the difference in the size of fans for forced and induced draft for a given steaming capacity of a boiler plant, the cost of installation is somewhat in favor of forced draft, and in some cases the smaller space occupied makes it advantageous to install forced draft. As far as the cost of operation is concerned, there is not much choice. There are cases, however, where induced draft cannot be applied. It cannot be used in connection with underfeed stokers or hollow



BOILER ROOM

PLAN



SECTION

grate bars. For marine work, and especially for war vessels, forced draft is almost invariably used because of the smaller space occupied.

Accompanying illustrations show the boiler plant of Harrisburg (Pa.) Steam Heat & Power Co., induced-draft equipment for which was furnished by the American Blower Co. of Detroit, Mich. They give a clear idea of the arrangement of boilers, economizers, fans and engines, and show how mechanical draft is adapted to plants of this character.

With a properly-designed mechanical-draft plant little or no smoke is produced, and where a smoke ordinance is enforced this in itself is sufficient reason for installing such an equipment.

The rate of combustion is rarely more than twenty-five pounds of coal per square foot of grate surface when the draft is dependent upon a stack, and even at that rate the stack becomes such a huge affair and so expensive that a higher rate of combustion is practically an impossibility without some other method of



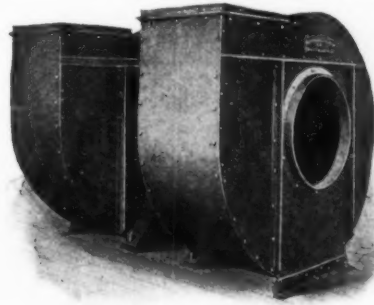
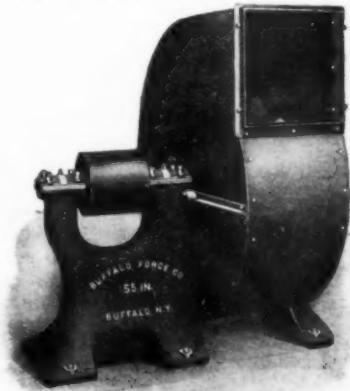
### Improved Buffalo High-Speed Steel-Plate Exhaust Fan.

The use of pneumatic current for conveying shavings, sawdust, cotton and other light substances is not a new field for the engineer. Perhaps it was nature's method of transportation that caused this method to be tried by man long ago. However, it is only within recent years that this method has met with success. The method of producing the current had heretofore been the cause of failure, but now this is so effectively and efficiently

In the first illustration will be seen a left-hand top horizontal discharge Buffalo planing-mill exhauster. The blast wheel is built up of curved steel-plate blades bolted at their center to the spider arms and at their edges to conical side-plates for securing additional rigidity. Wrought-iron tee arms cast into a heavy cast-iron hub form the spider. The scroll and sides of the housing are of heavy steel plate, bolted together and rigidly braced with angle irons. The cast-iron pedestal provides large oil-ring bearings for the pulley shaft, on which the

it is desired to collect the refuse it is usually discharged into a Buffalo shavings separator, by means of which the woody particles are effectually separated from the air currents. If to be burned, the refuse is discharged from the separator into bins, which are best located near the furnaces, so as to render further handling unnecessary.

In conclusion, the company says that in handling a given volume of air the friction head or pressure which opposes the fan varies inversely as the fifth power of the diameter. The absorption of power applied to Buffalo planing-mill exhausters by friction will not exceed 10 per cent. to 17 per cent. under proper application.



IMPROVED BUFFALO HIGH-SPEED STEEL-PLATE EXHAUST FAN.

produced by the improved Buffalo high-speed steel-plate exhaust fans or planing-mill exhausters, manufactured by the Buffalo (N. Y.) Forge Co., that the method of conveying by means of air currents has no insuperable difficulties; in fact, it has been so perfected that other duties are now performed with pneumatic currents with a saving of time, labor and money. Among these duties might be mentioned the following: The elevation of wool, cotton and other textiles, as well as grain, the removal of the heavy fine refuse resulting from grinding, polishing and buffing processes, and the injection of

overhanging blast wheel is securely keyed. The perfection of these bearings enables the fan to be driven for long consecutive periods with minimum attention.

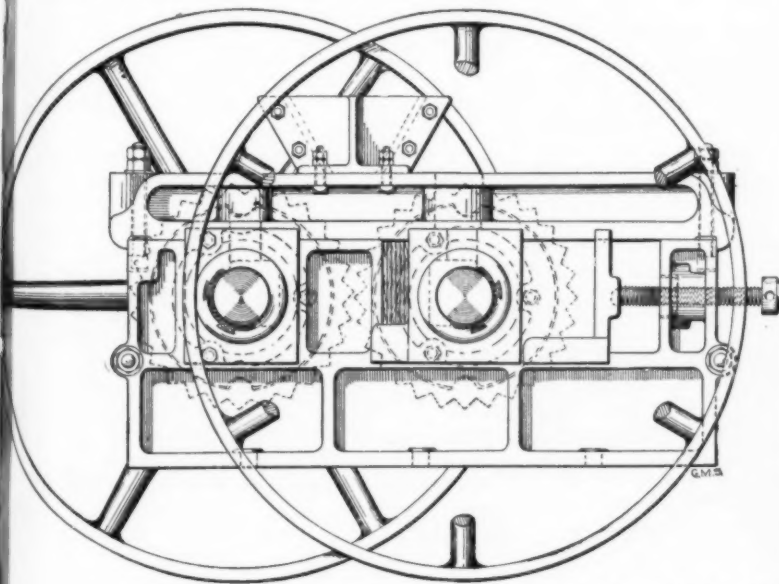
When the piping of the system is likely to be complicated, the fan shown in the second illustration often changes it to a very simple system. It will be seen that this unit exhausts from opposite directions, while the discharge is in the same direction. It requires but one belt, and may be placed upon a raised platform, entirely out of the way. The capacity is double that of a single fan under similar conditions.

### C. G. Buchanan's Patent Toothed Rolls.

A number of toothed rolls have been designed and put upon the market, but as most of them are light in construction, faulty in design, and being intended to sell at a low price, they are not as well finished as other types of rolls.

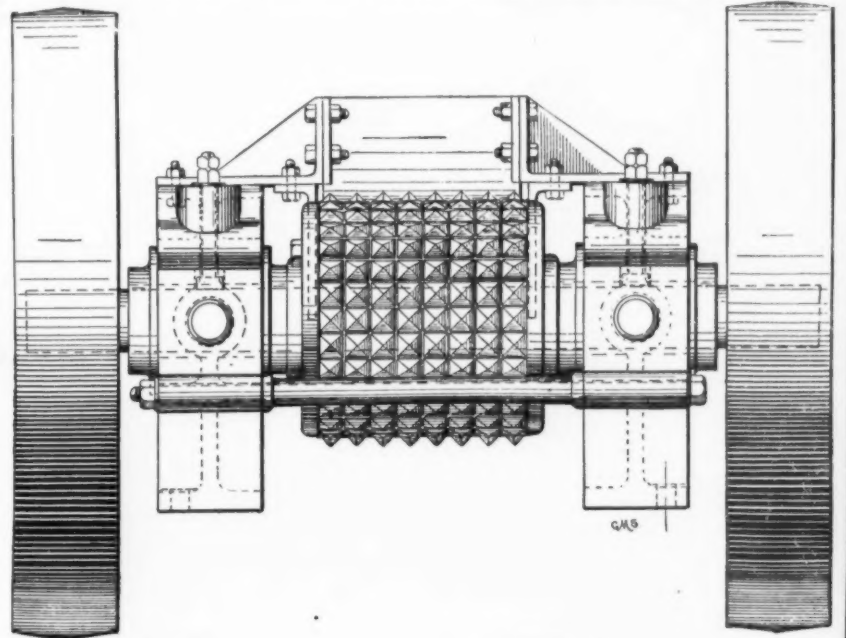
The toothed roll illustrated herewith is considerably heavier than the ordinary type, and is exceedingly well built. All joints are machined and fit accurately.

The crushing surface is made up of a number of machined rings of open-hearth or manganese steel, bored or ground on the inside and fitted to a turned center. These sectional rings have a number of pyramidal projections formed on them, the shape and size of same depending upon the character of the material to be treated. The rings are so arranged on the center that the points do not come opposite each other laterally, but the points on one roll fit into corresponding cavity or groove on opposite roll. This arrangement gives a very powerful crushing action, as most of the material is broken by the point of a tooth striking a piece supported at each end or on two points of rings on opposite roll, so that the center of the mineral to be broken is unsupported, and will consequently break under much less pressure and consumption of power than could possibly be obtained from rolls having smooth surfaces or from a single-toothed roll working against a plain fixed surface. These rolls are usually furnished with four heavy coiled springs behind each bearing of the movable roll, and any pressure up to twenty-five tons can be put upon the springs by means of the heavy screws at end of frame. For soft material is used a hollow casting called a "breaking cup," which is placed between the sliding journal and the point of the adjusting screw. This casting is light, very cheap to replace, and strong enough to crush ordinary material, but is relatively weaker than other details, and will yield in case of the accidental intrusion of iron or any foreign substance too hard to crush. These cups can be very quickly replaced, and will prevent breakage of important and expensive parts. The adjustment to crush fine or coarse is made by means of "shims" placed in front of sliding-roll journals and frame; by removing one or more of these shims the rolls can be set closer together, and will produce



SIDE ELEVATION.

C. G. BUCHANAN'S PATENT TOOTHED ROLLS.



END VIEW.

powdered coal into high temperature furnaces.

Space will not permit of a detailed description of the variations in the system when applied to so many uses, so that it must suffice to describe the system as applied for the purpose of conveying sawdust and shavings.

The size and construction of the apparatus must of necessity vary with the number of woodworking machines to be served, the positions of these machines, the direction from which the shavings are drawn and in which they are to be discharged.

Starting at the woodworking machines, the refuse, usually expelled at a comparatively high velocity from the teeth knives or cutting parts, is caught by the hoods of light sheet iron, which are placed in close proximity to the surface from which the refuse is cut. Each such hood is connected to the main exhaust pipe, which is increased in size as it nears the fan, and must handle the refuse of more machines. These pipes should be as short as possible, but should not have short bends. After passing into the fan, the sawdust or shavings is discharged into a pipe, which conveys it to any depository. When

The shafts are of the best quality of steel. Particular attention is paid to insure perfect lubrication and exclude dust and grit from the bearings, which are unusually long and large. They are lined with the best babbitt metal, and a large space is left on inner side of journal for the introduction of waste, which absorbs surplus oil and excludes the dust. There is, of course, no strain or wear on the portion of the journal left open for waste, as all the strain on the bearings is exerted in a backward and downward direction, and the babbitt metal is so placed that it will receive all the pressure due to crushing.

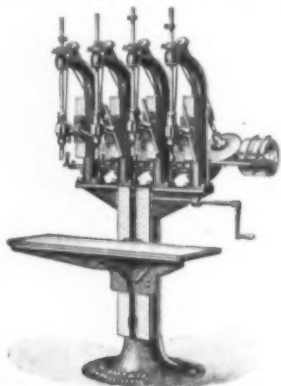
finer material; by adding one or more the rolls are set further apart and produce coarse material. When desired an automatic roller feed is supplied with the rolls, which insures a perfectly even and uniform flow and distribution of the material to be crushed. The sectional rings, when worn in the center, can be taken off and applied to the ends, while the end rings, which will not be worn so much, can be put in center, so that the teeth can be worn very evenly, and in case of breakage a new ring can be substituted quickly and at very small cost. The rings are bored to a standard gauge, and are inter-

changeable, as are all other parts of this machine. These rolls have a very large capacity, and are suitable for crushing phosphate rock, gypsum, coal, coke, oyster shells, glass sand, or any tough material, but they are not recommended for extremely hard substances. This machine has been in successful operation a number of years, and has given the best of satisfaction. Four sizes are made, namely, 18x15 inches, 18x36 inches, 24x20 inches and 24x30 inches.

These machines are made by the Geo. V. Cresson Co., Philadelphia and New York, who have fitted up a special department in its extensive plant for the manufacture of all kinds of crushing, elevating and conveying machinery. For further information address C. G. Buchanan, consulting engineer for the Geo. V. Cresson Co. in this department.

#### Multiple-Spindle Drilling Machine.

Manufacturers utilizing upright drilling machines in their operations are invited to investigate the make of machine presented in the accompanying illustration. This machine is a new design as regards multiple-spindle drilling machines. It avoids the expense and annoyance of numerous belts. It provides a means whereby a greater range of speed is obtained, and at the same time greater driving power. The friction-driving feature reduces the cost of maintenance to a small percentage as compared with belts. The gears are all guaranteed Bilgram cut. All running parts are finished all over before painting, which ensures perfect balance. All shafts and spindles are finished in the



MULTIPLE SPINDLE DRILLING MACHINE.

grinding machine. These machines, as well as the other styles of single and multiple-spindle machines, are made in the most accurate and thorough manner. The manufacturers will continue to make the belt-driven drills, as many people prefer them. The new friction and gear-driven are furnished in sizes from two to seven spindles, inclusive, and the belt-driven in several styles with one spindle, also two, three and four spindles. Progressive buyers in this class of machinery are invited to write the manufacturers, Messrs. H. G. Barr & Co., Worcester, Mass., for further particulars and prices on these drills.

#### Bowen's Oil Cups.

In our issue of April 3 reference was made, with accompanying illustrations, to the Bowen oil cups. These cups are offered to makers of machinery as comprising qualities of efficiency and general satisfaction that are not to be found in any other cups. They are absolutely dust-proof and self-closing, also excellently finished and designed. In our former reference the oil cups were erroneously referred to as grease cups and vice versa.

The Bowen Manufacturing Co. of Auburn, N. Y., manufactures these cups, making them a specialty, and their manifold merits have created an extensive and large demand. The most progressive ma-

chinery builders in the country are adopting the Bowen oil cups, and those not as yet acquainted with the perfection of the devices are urged to send for full details.

#### James A. Trane Gravity System of Heating.

This is a new departure in heating residences, flats, stores, office buildings, or any building where low-pressure steam would be a suitable heating medium.

The advantages of this system over the present method of steam or hot water are claimed to be numerous. The principal advantage is the great economy in fuel, which will average at least 25 per cent. The reason for this is easily explained. Water boils at 212° F. at the atmospheric pressure; hence no steam can be generated in the ordinary steam-heating apparatus until the water in the boiler has reached a temperature above 212° F. Then, on the other hand, as soon as the temperature in the boiler falls below 212° F. no heat is given off, as the water has ceased to boil, although there may be fuel enough in the fire-box to burn for several hours without getting any beneficial results.

With the gravity vacuum system it is entirely different, as water boils in a perfect vacuum at 98° F. Although it would be impossible to create a perfect vacuum, it is possible, however, with this system to create a strong partial vacuum, frequently as high as twenty-five inches. In twenty-five inches vacuum water boils at 126° F.; therefore with this system, starting a fire when the system is cold, and a vacuum of twenty-five inches has been established, water will begin to boil and generate steam at 126° instead of 212° F. Then, on the other hand, when the fires are allowed to cool down the heat does not cease at 212° F., but a circulation of steam will be maintained until the temperature in the heating system falls as low as 130° to 126°. Hence there is a large gain for the vacuum system.

With this system pressure can be carried whenever occasion requires it, such as in extreme cold weather. This can be done without any change whatever, except to increase the fire. In moderate weather it is not necessary to overheat, as with this system very low temperatures can be maintained while the heating plant is run in vacuum.

Foul Air and Gas.—With the ordinary steam-heating system the air valves continually discharge foul and dangerous gases from the radiators into the room, while with the gravity vacuum system not a particle of air is discharged in the rooms. As the entire system is hermetically sealed, there is no escape of air or gas into the rooms.

The vacuum apparatus, or machine for creating the vacuum, is very simple, yet absolute in its operation. There are no valves in connection with it, nor anything else that can get out of order. A mercury seal is used, which will readily admit the air contained in the system to be expelled with the slightest pressure, but will positively prevent its return through itself. Storm Bull, professor of steam engineering at the University of Madison, Wis., made an efficiency test of the system last year, with remarkable results.

James A. Trane of 201 South Fifth street, La Crosse, Wis., is introducing the system, and solicits inquiries from interested parties.

E. Moreau, 28 Rue de l'Echiquier, Paris, who is interested in trade with the Latin Americas, Africa and the East, writes to the Manufacturers' Record that he desires to get into communication with American manufacturers of cotton piece goods, including domestics, zephyrs, shirtings, ginghams, trouserings, etc.

## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### LUMBER MARKET REVIEWS.

#### Baltimore.

Office Manufacturers' Record,  
Baltimore, Md., April 16.

The week under review has been a fairly active one in the local lumber market, and the favorable weather prevailing has contributed largely to the immediate delivery of lumber. The demand from local and out-of-town buyers is improving, and box factories and other woodworking concerns are in the market for various sized lots. Receipts of all classes of lumber are more liberal, and prices are generally very steady at the recent advance. The general advance in lumber as compared with the same period last year will likely reach from \$2.50 to \$5.50 per thousand, and in isolated cases perhaps higher. North Carolina pine is holding its own, and during the month of March and so far this month the volume of business is said to have been the largest in the history of this industry. Cypress is steady, with a better demand, and some large transactions are reported during the past week. Poplar is still one of the most popular woods, and there is an increased demand, with values firm and a shade higher. In all hardwoods there is a better feeling, with the distribution reaching out more extensively. Prices for oak, ash and other woods continue to rule steady, with receipts light and stocks at milling points not excessive. The export trade is quiet; North Carolina pine men have a large domestic trade, and find quicker returns than deals in a foreign market. Hardwood exporters view the situation as more promising in the near future, as stocks abroad are much reduced.

#### Norfolk.

[From our own Correspondent.]  
Norfolk, Va., April 14.

The lumber trade in this section is now of a most encouraging character, and manufacturers and others engaged in this industry predict an unusual volume of business during the spring and summer months; in fact, the present year is expected to show a greater share of prosperity than has been witnessed for some years past. In the North Carolina pine trade this will prove especially true, as at the moment orders are quite as plentiful as at any month so far this year. The demand seems to be more general, and from the North and East and Middle West the inquiry is most decided. Foreign exports are consequently falling off, and manufacturers are giving their attention almost entirely to domestic business. With regard to prices there is a very steady tone present, and the price-list of the North Carolina Pine Association is well maintained. There is not likely to be any further sharp advance, but holders are very firm in their views, and there is considerable difficulty in filling orders, as stocks are running very low in some cases. The local demand is also considerable, as there is much building going on in the city proper and suburbs. The hardwood business is assuming greater proportions each year, and the volume of transactions indicate important foreign shipments during the spring months. Planing mills and all woodworking concerns are full of business, and are increasing their capacity in many cases. Lumber freights are firm, and vessels of desirable tonnage are offered moderately. The schooner Jennie N. Huddell, 265 tons, was chartered last week to load lumber here for New York at \$2.40. Rates to

Sound ports are \$2.50 to \$2.67  
ward \$2.75.

#### Savannah.

[From our own Correspondent.]  
Savannah, Ga., April 14.

The lumber trade of this port is at present showing unusual activity in all its departments, and from the number of charters recently closed indications point to a steady and substantial business during the spring and summer months. The largest amount of tonnage ever under charter by a single firm here has just been engaged, amounting to 11,515,000 feet. The demand from Northern and Eastern ports continues to show remarkable volume, and the inquiry for crossties, railroad and shipbuilding timber and other wood products is at present most decided in character. Advances from milling points in the interior are more favorable, and under better weather conditions manufacturers are increasing their output at mills. Stocks, however, do not accumulate to any extent, as at the present rate of shipment at ports lumber is going forward in considerable quantities. At Brunswick the market is decidedly brisk, and both the foreign and domestic inquiry is all that could be desired. The presence at Brunswick of foreign lumber agents is significant, and from Cuba, Mexico, Central and South America some good orders have been received. The demand from Spain is also showing considerable improvement, and the crosstie industry is active, large orders from Cuba and Mexico having been received recently. A large fleet of vessels have completed their cargoes, and a number of vessels are now due to arrive to load for foreign and coastwise ports. Savannah shipments last week amounted to 2,800,000 feet of lumber and crossties, and the total shipments of wood products for the present month will exceed so far that of any month during the present year. Sail tonnage freights are quiet, with tonnage scarce and rates for desirable vessels firm. Coasting lumber rates are strong, under a good demand and light offering of tonnage. Charters reported are schooner Gladys, 646 tons, from Brunswick to New York with dry cypress at \$4.87½; schooner Iona Tunnell, 1118 tons, from Brunswick to Philadelphia with ties at 14½ cents; schooner B. H. King, 1022 tons, from Fernandina to New York with ties at 15½ cents.

#### Mobile.

[From our own Correspondent.]  
Mobile, Ala., April 14.

The tone of the pitch-pine timber market continues firm, and stocks will soon be absorbed by the vessels already chartered, and future receipts are likely to remain uncertain. Sawn timber when placed upon the market will bring 15½ to 16 cents per cubic foot, and sales at the latter figure are reported during the past week. Hewn timber is steady at 15½ to 16½ cents per cubic foot. Shipments of lumber have been larger than usual during the past week, and the market is active, with a good demand from Cuba and South America. The shipments of lumber for the past week amounted to 2,350,000 feet, and for the season 58,441,636 feet, against 68,063,541 feet last year. The steamer Voorburg cleared for Liverpool with 11,380 cubic feet of hewn timber, 157,457 cubic feet of sawn timber and 67,724 feet of lumber. The hardwood trade is showing up in a more favorable light as the season progresses, the mahogany business becoming quite an important factor. The Mobile Lumber Co. is a large importer from Cuba and Mexico, and at the company's mills here the logs are sawn and the mahogany lumber shipped to points in the interior. A large



of hardwood lumber was made Saturday to Liverpool, consisting of 10,000 cubic feet of oak timber, 9,695 cubic feet of poplar timber and a lot of 17,002 cubic feet of hewn pitch-pine timber. Stocks of logs of all kinds are light, sales of a lot of pine logs being made last week at \$10. Oak logs are steady at \$8 to \$12 per 1000 feet, cypress at 8 to 15½ cents per cubic foot, and cottonwood \$4 to \$5 per 1000 feet. Timber freights continue steady, with a moderate offering of desirable tonnage.

### Beaumont.

[From our own Correspondent.]

Beaumont, Texas, April 12.

With the opening of spring weather the yards and planers are making much heavier shipments, and prices are more firm on those lines as a result. The planers are running at night throughout Southeast Texas, and the shipments are very heavy on flooring and ship lap. The inner-finish material is not going quite so rapidly, but that is due simply to the fact that all the yards seemed to have run short on one class and not the other. Prices are up, and there is nothing in sight to indicate that there will be anything of a falling off at any time soon. The manufacturers have stopped asking any higher prices, but when a dealer comes in and wants an order at break-neck speed he can get it a little earlier by paying a little more for it. On ties and timbers there is a good demand, and the prices for ties in the three grades are holding up, with a remarkably strong tendency to go even higher. There are a great many sap-tie orders on the books at \$10; in fact, that is regarded as the prevailing price, and the better grades are correspondingly higher. The local demand for lumber is sufficient to take the cut of one of the large Beaumont mills alone. It runs to about 2000 feet per month, which places Beaumont as perhaps the largest retail market in the South.

### LUMBERMEN IN CONVENTION.

State Association Meets at Houston, Texas.

The sixteenth annual convention of the Lumbermen's Association of Texas met at Houston on the 8th inst. Lumbermen from all parts of the State and Louisiana were present, and the sessions were in every respect harmonious, while the lumber industry in all its avenues was thoroughly discussed. President Lingo of Denison called the association to order, introducing Mayor Holt of Houston, who made the address of welcome to the members of the association. At the conclusion of Mayor Holt's address the president called upon the Hon. John H. Kirby, who spoke in behalf of the lumbermen of Houston. Mr. Kirby was enthusiastically applauded when he appeared on the platform. He had been connected with the lumber business in Texas for the past fifteen years, he said, and had been a member of the Texas Lumbermen's Association for that time. He chose this vocation because he was an optimist. If there is any one great characteristic more conspicuous in the lumberman than another it is his optimism. The lumberman is cheerful, jolly, generous and noble. He was glad away down deep in his heart to welcome such a magnificent body of gentlemen to Houston. He hoped the association would come to Houston en masse every year and make the city its Mecca for years to come. The lumbermen of Houston were alert, honest and genial, and they were always delighted to greet their brethren. Houston was progressing splendidly and rapidly. Only yesterday, he said, the city took a new Holt on prosperity, and it was going to move on now at a rapid pace. (Great applause.)

Of optimism, he said, he could better illustrate his remarks by telling the story of the two toads that fell into a pan of milk. One was a pessimistic toad and the other was bubbling over with optimism. The pessimistic toad had no sooner struck the milk till it cried, "Oh, this is too much for me!" and folding its little legs it proceeded to die. (Laughter.) Not much of a lumberman's principles in this. (Laughter.) The other toad was an optimistic toad. He cried, "Oh, I'll not get stuck here!" and began to paddle around. So next morning the milkmaid found a fat, jolly toad ready to hop off a large cake of butter when she appeared on the scene. (Laughter.) That toad represented the lumbermen. (More laughter.)

Heretofore the lumberman had been hampered in Texas, he thought, by lack of capital, but that difficulty was being overcome. New roads have entered our forests and are now engaged in developing them. The lumberman was doing his share toward this development. The lumberman was always in a good humor, always ready to trade, ever expounding optimism and defying the pessimist.

There are some who believe that the forests will all soon be gone; that the song of the saw-mill will be hushed and the vocation of the lumberman, like that of Othello, will be gone. He did not subscribe to such doctrine. He was reared out in the shadows of the pines, and he had studied the forest. By care and attention the fine forests of yellow pine and other valuable trees could be made to reproduce themselves. The lumber industry would never cease to be one of the most important in the world, and the saw would be whirring and the woodsman's axe be plying long after the people now on earth had been crumbled to dust.

At the afternoon session President Lingo delivered his annual address. The secretary and treasurer, Mr. Carl F. Drake, submitted his annual report, giving a comprehensive and elaborate review of the work of the year. The committee on legislation also filed its report. The committee on statistics presented the following report: The annual report of the railroad commission of Texas shows that the railroads in that State during the year ending June 30, 1901, handled 5,935,000 tons of lumber, shingles and other forest products, or an equivalent of more than 210,000 carloads of 40,000 feet to the car. The following figures are from the annual report of the secretary of the Southern Lumber Manufacturers' Association for the year 1901: Louisiana cut, \$57,000,000 feet; shipments, \$41,000,000 feet; on hand, 295,000,000 feet. Arkansas cut, \$69,000,000 feet; shipments, \$39,000,000 feet; on hand, 214,000,000 feet. Texas cut, \$81,000,000 feet; shipments, \$58,000,000 feet; on hand, 165,000,000 feet. The officers elected for the ensuing year were as follows: President, E. N. Lingo of Denison; vice-president, G. W. Owens of Oak Cliff; secretary and treasurer, C. F. Drake of Austin.

### Lumber Notes.

The New Jersey Salt Co. of Morgan City, La., is establishing a large shipyard and stave and barrel plant on the Pascagoula river, near Scranton, Miss.

The Auburn Timber Co. of Wilmington, N. C., has been chartered with a capital stock of \$25,000. The incorporators are W. A. Williams, William Latimer and H. G. Latimer, Jr.

It is stated that since January 1 the John H. Kirby Tie Co. of Houston, Texas, has delivered to the Gulf, Colorado & Santa Fe system upwards of 700,000 cross-ties. The company has a contract to furnish the Santa Fe system about 7,000,000 cross-ties.

The Chillhowie Lumber Co., with principal offices at Chillhowie, Smyth county, Virginia, lost its valuable lumber plant by fire last week, together with much valuable lumber. The loss is estimated at about \$40,000.

The J. H. Kirby Lumber Co. of Houston, Texas, has sold to the Swift Packing Co. 6,000,000 feet of lumber, to be used in the construction of the Fort Worth packing-houses. The lumber is to be delivered on demand as needed.

The Weldon Lumber Co. of Weldon, N. C., has been chartered, with a capital stock of \$100,000. The incorporators are J. L. Shepherd, Petersburg; G. L. Vincent, Jarratts, Va.; C. A. Shepherd, Richmond, and Selden Goode of Weldon.

The new plant of the Chesapeake Furniture & Woodworking Co. of Norfolk has begun operations. The plant is equipped with modern woodworking machinery, and will manufacture furniture, sash, doors, blinds and other building material.

The plant of the Atlantic Shingle Mills, near Wilmington, N. C., has been completed, and commenced operations last week. In a few days the entire factory will be running at its full capacity of 60,000 shingles a day. Both cypress and juniper shingles will be manufactured.

A sash and door factory is to be put in operation near Orange, Texas, at an early date. The factory will be located on the site of the C. A. Russell Lumber Co.'s mill. Nearly all the machinery is on the ground, and is being put in position. All of the capital, \$20,000, has been paid in, and charter applied for.

Messrs. Brobston, Fendig & Co. of Brunswick, Ga., sold last week to Mr. F. M. Snell of Milwaukee and the Oemulgee Lumber Co. of Lumber City, Ga., 12,000 acres of timber land near Brunswick. The purchasers announce that it is their intention to at once erect a large box factory in the city, and also one of the largest saw-mills in that section.

The steady rains of last week caused a 17-foot flood in the Susquehanna river and millions of feet of logs which lined the banks from the big boom at Williamsport, Pa., to the headwaters have been rushing down the river. It is estimated that the boom at Williamsport will contain 58,000,000 feet of logs, five-eighths of the season's cut, as a result of this freshet.

The lumber business at Scranton, Miss., is showing unusual activity. The sixteen saw-mills and five planers at Moss Point, besides two mills at Scranton and two at West Pascagoula, are running on full time, while the shipyards have all they can do. The British steamship Onslow sailed from Horn Island on the 7th for London, Eng., carrying a cargo of over 2,000,000 feet of lumber.

The Tygart's Valley Manufacturing & Lumber Co. has been chartered with a capital stock of \$150,000, the amount already subscribed being \$125,000. The incorporators are Edward W. Mealey, Richard H. Alvey, Jr., and Edward M. Allen, Jr., of Hagerstown, Md.; John G. Rouse of Belair, Md., and J. A. G. Allen of Davis, W. Va. The principal office of the company will be at Hagerstown, Md.

The fifteenth anniversary and annual meeting of the Philadelphia Lumber Exchange was held in that city on the 10th inst. The total arrivals at that port for the year amounted to 424,484,000 feet, or nearly 2,000,000 feet more than the previous year, and 40,000,000 feet above the average for the past ten years. The election of officers resulted as follows: President, Edward F. Henson; vice-president, Samuel B. Vrooman; treasurer, Harry Humphrey; secretary, A. T. Goodman.

The Norfolk Lumber Co. of Norfolk, Va., recently organized, has been chartered with a capital stock of \$2500, with privilege of increasing it to \$25,000. The officers of the company are James E. Etheredge of Norfolk, president; L. O. Parrish of Fayetteville, N. C., vice-president, and H. W. Johnson of Norfolk, secretary and treasurer. The company will buy and sell timber lands and manufacture lumber.

The thirteenth annual meeting of the stockholders of the Darlington-Miller Lumber Co. of Galveston was held in that city last week, and the following officers elected: A. W. Miller, president; C. H. Moore, vice-president, and C. S. Vidor, secretary and treasurer. The business of the company is in a most prosperous condition, having more orders than can be supplied with the company's mills running night and day.

The tract of land in Louisiana recently purchased by the Great Southern Lumber Co., composed of Buffalo and Baltimore capitalists, recently organized, is about to be developed. Mr. Carnett, a representative of the company, visited New Orleans last week for the purpose of examining the section of timber land purchased, and it is stated that the company intends to construct mills and build railroads where they are needed.

The movement at Charleston last week in wood products was unusually brisk, and the improvement at that port in lumber shipments is decidedly favorable. During the week the following vessels cleared: Steamship Navahoe for Boston with 142,886 feet of lumber; steamship S. V. Luckenbach for Philadelphia with 2,225,000 feet; steamship Egda for Charlotte, P. E. I., with 2,000,000 feet; schooner John W. Hall for New York with 241,500 feet, and schooner Jose Oliveri with 450,000 feet.

The Clyde Line steamships cleared last week from Jacksonville, Fla., with full cargoes. The Comanche for New York had on, with other cargo, 300,000 feet of lumber, and the Arapahoe 450,000 feet of lumber, 3000 bundles of shingles and other cargo. The Algonquin for Boston cleared with 300,000 feet of lumber, 4000 bundles of shingles, 1200 cross-ties and other cargo. The schooner Henry Weller cleared for Stonington, Conn., with 350,000 feet of lumber, and the schooner Warren Adams for New York with 440,000 feet. Additional shipments reached over 1,200,000 feet.

The semi-annual meeting of the Retail Lumber Dealers' Association of Mississippi was held on the 8th inst. at Jackson, President Tucker presiding. The president, in his address, stated that the retail lumber trade was in a more satisfactory condition now than for some years. Interesting papers were read by Mr. E. W. Buron of Pickens, Mr. N. H. Alexander, and Mr. Frank H. Bryan, of New Orleans. The following officers were elected: B. A. Tucker, president; Senatobia, Miss.; S. L. Hearn, vice-president, West Point, Miss.; W. G. Harlow, secretary and treasurer, Yazoo City, Miss.

Mr. C. B. Carter of Knoxville, Tenn., secretary-treasurer of the Southern Hardware Jobbers' Association, announces that the recent disastrous fire at Atlantic City will not interfere at all with the program for the meeting there of the association as originally intended. The hotel which has been selected as official headquarters was not at all damaged by the fire, and Mr. Carter writes that manufacturers and others who contemplate attending the convention need have no fear of being inconvenienced during their stay at Atlantic City on account of the fire.

# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

## ALABAMA.

Alexander City—Bottling Works.—A. S. Cotton and M. Wilson will establish bottling works.

Birmingham—Iron-ore Mines.—Songo Mining Co., recently reported incorporated by Morris Adler and others, will operate iron-ore mines developed some time ago.

Birmingham—Oil and Gas Wells.—Reid's Gap Oil, Gas & Mining Co. has been incorporated for development of oil, gas and mineral lands, with capital stock of \$100,000, by Robert R. Zell, John L. Burns, J. R. Adams and others.

Birmingham—Plaster Works.—W. M. Orr, general manager of Indiana Wood Fiber Plaster Co., is investigating with a view to establishing \$500,000 plant in the Birmingham district.

Birmingham—Oil Wells.—St. Stephens Oil Co. has been incorporated, with capital of \$25,000, to bore for oil, by J. P. Ross, Culpeper Exum, B. F. Roden, Thomas S. Plowman and others.

Birmingham—Pharmacy.—Chartered: City Hall Pharmacy Co., with capital of \$3000, by Sidney H. Baker, Richard B. Hunter and Milton E. Godbey.

Birmingham—Steam Bakery.—Electric Steam Bakery Co. has been incorporated, with capital stock of \$10,000, for conducting and enlarging bakery (established). W. D. Lane is president; H. M. Dozier, vice-president; R. S. McCarty, secretary, and C. S. Simmons, treasurer.

Birmingham—Furnace.—Republic Iron & Steel Co., Chicago Stock Exchange Building, Chicago, Ill., states that it expects to blow in its Thomas (Ala.) furnace in about ten days, as lately reported, but has not in immediate prospect the opening up of new mines or making other improvements; Chas. E. Graves, assistant secretary.

Birmingham—Terra-cotta-pipe Plant.—Company will be organized, with capital stock of \$100,000, for establishment of a terra-cotta-pipe plant. Names of those interested will be announced later.

Birmingham—Sewerage.—Jefferson County Sanitary Commission will advertise for bids to be opened May 20 for construction of two sanitary sewers, in accordance with plans of Engineer Julian Kendrick.

Courtland—Cotton-oil Mill and Fertilizer Factory.—It is reported that a \$30,000 company will be organized for establishment of a cottonseed-oil mill, and probably a fertilizer factory. T. W. Pratt of Huntsville, Ala., can give information.

Ensley—Electric Plant.—Central Light & Power Co. will, it is said, enlarge its plant.

Ensley—Gas Plant.—Chas. A. Nolan has applied for franchise for erection of gas plant.

Huntsville—Road Improvements.—Madison county will make extensive turnpike improvements. Address S. M. Stewart, county judge.

Marion—Electric-light Plant.—Marion Electric Light & Power Co., reported recently as having received ten years' franchise for lighting city, has organized, with W. H. England, president; T. H. Kemp, secretary, and B. M. Lide, treasurer.

Mobile—Glass-jar Factory.—Dr. William Sindorf will erect factory for manufacture of his patent air-tight glass jar, as recently reported. A. McCrary, 63 St. Michael street, is the architect.\*

Mobile—Fish and Oyster Company.—Mobile Fish & Oyster Co. has increased its capital stock to \$50,000 and ordered five new smacks.

New Decatur—Planing Mill.—E. C. Payne will rebuild his planing mill, recently burned at loss of \$5000.

Opelika—Cereal Food Mill.—F. E. Kelsey, president of Battle Creek Food Co. of Battle Creek, Mich., is investigating with a view to establishing a mill to manufacture cereal foods at Opelika.

Pell City—Cotton Mill, Cottonseed-oil Mill and Ginnery.—Pell City Manufacturing Co., reported incorporated, etc., last week with \$500,000 capital, will erect mill building three stories high, 150x500 feet, to contain 12,000 spindles, etc., for making delinins; also will erect cotton ginnery and cottonseed-oil mill. Ramsey-Relly Engineering & Construction Co. of Birmingham, Ala., made preliminary surveys for site. Boston architects are preparing plans. Geo. W. Pratt, 427 Prudential Building, Atlanta, Ga., is president.

Piedmont—Furnace.—It is reported that the Alabama & Georgia Iron Co., Cedartown, Ga., contemplates building a furnace near its ore properties at Piedmont.

Piedmont—Cotton Mill.—Coosa Manufacturing Co., reported recently to build additional mill of 10,000 spinning spindles and 4000 twisting spindles, will erect two-story building 102x190 feet to contain the textile machinery. Architects are now preparing plans. Machinery, all except power plant (of 400 horsepower), has been ordered. A. G. Thacher, 1415 Delaware avenue, Wilmington, Del., is president.

Prattville—Electric Light.—W. F. Wilkinson has made proposition for supplying the town with electric lights.

Prattville—Oil Mill and Fertilizer Factory.—Allen Northington, M. S. Wadsworth, C. W. Smith, C. E. Thomas and others have organized Autauga Oil & Fertilizer Co., with capital stock of \$50,000, for erecting and operating cottonseed-oil mill and fertilizer factory.

Wetumpka—Telephone System.—It is reported that W. L. Lancaster will organize company for constructing telephone system.

## ARKANSAS.

Fort Smith—Stone Company.—Chartered: Monumental & Cut Stone Co., with capital of \$5000, by Nicholas E. Bolle, J. A. Hoffman, Claude Hoffman and others.

Helena—Iron and Tube Works.—Alabama Tube & Iron Co. (Birmingham, Ala.) has increased capital stock from \$150,000 to \$200,000 to complete extensive improvements now under way at Helena.

Little Rock—Cotton Compress.—Arkansas Roundlap Bale Cotton Co. has amended charter, increasing capital stock from \$20,000 to \$300,000, and for enlarging the scope of its enterprise.

Mena—Construction.—Chartered: R. M. Quigley Construction Co., with capital stock of \$100,000, by R. M. Quigley, C. C. Weems and F. N. Hancock.

Morrilton—Gin.—Chartered: Farmers' Gin Co., with capital of \$5000, by R. A. Dowdle, president; Henry James, vice-president; O. O. Scroggins, secretary-treasurer.

Star City—Telephone Company.—Star City Telephone Co. has been incorporated, with capital of \$10,000, and H. D. Palmer, president; W. J. Savage, vice-president; Isaac

Bankston, secretary, and J. G. Atkinson, treasurer.

Watson—Mercantile.—Poage-Daugherty Co. has been chartered, with capital of \$10,000, by A. S. Dougherty (president) and others.

## FLORIDA.

Apalachicola—Water-works.—City contemplates the construction of water-works to cost about \$3000. G. W. Hinsley, city clerk, Box 3, can be addressed.\*

Egmont—Water-works.—Geo. H. Crapts of Atlanta, Ga., has been awarded contract for works at government artillery post.

Myers—Water-works.—City will vote April 15 on issuance of \$1500 of bonds for water-works. Address "The Mayor."

Ocala—Phosphate Lands.—Thomas S. Coolidge, Benjamin J. Potter and others have incorporated Union Phosphate Co., with capital of \$30,000, for development of phosphate lands.

Pensacola—Cotton-oil Mill.—Southern Cotton Oil Co. has purchased site and will build cottonseed-oil mill.

Tampa—Mercantile.—Chartered: Hillsboro Grocery Co., with capital of \$20,000, by Lawrence J. Cooper and others.

## GEORGIA.

Albany—Cotton-oil Mill.—Georgia Cotton Oil Co. will expend \$15,000 in improving its plant.

Athens—Cotton-oil Mill, Fertilizer Factory and Ginnery.—W. M. McKenzie and A. M. Dobbs of Atlanta, Ga., and J. C. Cooper of Athens will form a \$100,000 corporation for establishment of large cottonseed-oil mill, fertilizer factory and ginnery.

Atlanta—Chemical Laboratory.—Robert E. Gramling Laboratory has been incorporated, as recently reported, and has building No. 1 completed. A second laboratory will be constructed, for which Collier & Brown will be architects; building to be three stories, slow-burning construction, cement floors, etc., and company has not as yet decided whether it will build itself or by contract. Plant complete will cost \$15,000. Address Robert E. Gramling, 1427-S Empire Building.\*

Augusta—Brick Works.—Frank R. Clark, Clarence E. Clark, E. J. O'Connor and others have incorporated Georgia Vitified Brick & Clay Co., with capital stock of \$100,000, and privilege of increasing to \$500,000, for development of clay mines, manufacture of brick, etc.

Brunswick—Box Factory and Saw-mill.—F. M. Snell of Milwaukee, Wis., and the Ocmulgee Lumber Co. of Lumber City, Ga., have purchased 12,000 acres of timber lands near Brunswick, and will erect large saw-mills and box factory at once.

Cave Springs—Fly-screen Factory.—Frank Wright will manufacture his patent fly-screen.\*

Clarksville—Furniture Factory.—Clarksville Tobacco Manufacturing Co. has made proposition to Northern parties for establishment of furniture factory.

Columbus—Bagging Factory.—J. Friedlander & Co., whose plant was recently damaged by fire to extent of \$12,000, have secured building and will install machinery to continue the manufacture of bagging.

Dalton—Electric-light Plant.—Town will build \$10,000 electric-light plant, as recently reported, but has not awarded any contracts for engineering the plant nor for machinery; Julian McCamy, mayor.

Decatur—Electric-light Plant.—W. J. Houston has franchise for erection of electric-light plant.

Elberton—Electric-light Plant.—B. M. Hall, civil engineer, Atlanta, Ga., is preparing report on improving electric plant at Elberton.

Fort Valley—Cotton-oil Mill.—W. L. Houser, J. P. Heath, E. L. Bryan and others have incorporated Fort Valley Oil Co., with capital of \$25,000, for erection of cottonseed-oil mill, for which no architect nor engineer has been employed and no contracts for machinery awarded.

Hogansville—Brick Works.—Trimble Brick Co., reported lately as incorporated, has plant already in operation.

Macon—Packing Company.—Sula Packing Co. has increased capital stock from \$100,000 to \$200,000.

Statesboro—Electric-light Plant and Water-works.—It is reported that Statesboro Water & Electric Co. will be granted franchise for water-works and electric-light plant.

Statesboro—Bed-spring Factory.—Joe De Medics and S. A. Kirkland of Thomson, Ga., will establish a bed-spring factory at Statesboro.

Waycross—Shirt Factory.—Jones Pants Manufacturing Co. will extend its business by the manufacture of shirts and drawers.

Waycross—Cigar Factory.—Company has been organized with capital of \$6000 for erection of cigar factory. Geo. R. Youmans is president; W. W. Sharpe, vice-president, and Geo. R. Brinson, secretary-treasurer.

## KENTUCKY.

Bakerton—Oil and Gas Wells.—Bakerton Oil, Gas & Mining Co. has been incorporated, with capital stock of \$20,000, by J. M. Thomas and J. P. Hastings of Cincinnati, Ohio, and F. H. Stephens of Bradford, Pa.

Corydon—Water-works.—G. C. & J. W. Doolittle have contract at \$15,788 for construction of city's proposed water-works.

Frankfort—Oil Wells.—Kentucky-Knox County Oil & Gas Co. has been incorporated, with capital stock of \$100,000, for development of 4000 acres of oil lands in Knox county which it has under lease. Judge Thomas Paynter is president; Judge James H. Hazelroog, vice-president.

Georgetown—Lumber Company.—Penn Lumber Co. has been incorporated, with capital stock of \$25,000, by Geo. H. Allen, A. K. Hawkins, O. D. Courtney and others, for dealing in lumber, building materials, etc.

Kentucky—Coal and Timber Lands, etc.—J. S. Stearns & Co. of Ludington, Mich., have purchased large tracts of coal and timber lands in Kentucky and engaged W. T. Culver of Ludington, Mich., chief engineer in charge, and Wm. A. Kuine of Coolidge, Ky., assistant. Contract for mining plant, etc., has been awarded to Southern Construction Co. of Harriman, Tenn. For full particulars address Engineer Culver.\*

Lawrenceburg—Furniture Company.—Warshall Furniture Co. has increased capital from \$12,000 to \$30,000.

Lexington—Power-house.—It is said that W. A. Wood, chief electrical engineer Bluegrass Consolidated Traction Co., is preparing plans for company's proposed \$800,000 power plant.

Louisville—Drug and Chemical Company.—J. D. Baldwin and W. E. Turner of St. Louis, Mo., have purchased and will operate the plant at Louisville of the Southern Pharmaceutical & Chemical Co.

Louisville—Oil Wells.—Judge J. M. Benton, L. H. Bush and W. T. Ogden of Winchester, Ky., representing Clark County Oil & Development Co., has purchased and will develop 4000 acres of oil lands in Clark, Montgomery and Powell counties.

Louisville—Brick Works.—Chartered: Jefferson Brick Co., with capital of \$9000.

Monticello—Oil Wells.—Banner Oil Co., with capital stock of \$50,000, has been incorporated by F. C. Cluxton, C. C. Kimball, John A. Hunter of Bradford, Pa., and others.

Paducah—Separating Plant.—It is reported that B. L. Pettigrew and T. C. Garrett of New York are investigating with a view to establishing a mill for separating the ingredients of ore.

Stanford—Oil and Gas Wells.—Lincoln Oil, Gas & Mineral Co., with capital of \$20,000, has been incorporated by J. T. Short of Louisville, M. S. Burgham of Stanford and others.

## LOUISIANA.

Crowley—Paper Mill.—A. K. Smith, paper manufacturer, of Pensacola, Fla., is investigating with a view to establishing a plant at Crowley.

Franklin—Oil Wells, etc.—People's Fuel Oil Co., Limited, has been incorporated, with capital of \$50,000, for operating oil wells, oil pipe lines, etc. F. B. Williams is president; Lewis S. Clarke, vice-president; John N. Pharr, secretary-treasurer.

Homer—Cotton-oil Mill.—Homer Cotton Oil Co., Limited, recently reported, has awarded contract for installation of its cottonseed-oil mill to the Cardwell Machine Co. of Richmond, Va.

Jennings—Oil Wells.—Calcasieu Land & Oil Co. has been incorporated, with capital of \$25,000, for development of oil wells, etc., by David Mahaffy, G. H. Morse, F. F. Morse and others.

Lake Charles—Irrigation Canal.—Calcasieu & Mermentau Canal Co. has filed charter, capital stock \$25,000, and L. Kaufman, pres-



dent; H. B. Milligan, secretary, and H. C. Drew, treasurer; purpose, to construct irrigation canal ten miles long.

Lake Charles—Furniture Company.—Welch Furniture Co. has been incorporated, with capital of \$50,000, by A. E. Bell, A. R. Miller, Philip Coverdale and others.

New Orleans—Land Improvement.—J. B. Alexander, James M. McLoughlin, Oscar Schreiber and others have incorporated Carrollton Land & Improvement Co., Limited, with capital stock of \$50,000, for dealing in and improving real estate.

New Orleans—Brewery.—Security Brewing Co. will erect new plant at a cost of \$30,000 to replace one recently burned.

New Orleans—Candy Factory.—A. W. Berdon, A. J. Nelson, T. D. Stewart and others have incorporated Nelson & Berdon Candy Co., Limited, for the manufacture of candy, etc.; capital stock is \$50,000.

New Orleans—Pulp Mill.—New Orleans Bagasse Pulp & Paper Co. has been incorporated, with capital stock of \$2,000,000, for manufacture of pulp out of sugar-cane as it comes from the mill. Incorporators include George W. Murch, Samuel V. Woodruff of Boston, Mass.; Louis A. Burleigh and Jos. Williamson, Jr., of Augusta, Maine.

New Orleans—Lumber Mills, etc.—Great Southern Lumber Co., organized several months ago for operating in Louisiana and Mississippi, has purchased 200,000 acres of timber lands in Louisiana, and will erect mills and construct railroad for developing the property. A. B. Carnett of Ansonia, Pa., and James Whalen of Chippewa Falls, Wis., are representatives of company.

New Orleans—Oil and Gas Wells, Mineral Lands, etc.—New Orleans Oil & Mining Co., with capital stock of \$1,000,000, has been incorporated for development of oil and gas wells, mineral lands, etc. Thomas J. Woodward is president; Wm. H. Byrnes, first vice-president; Thomas W. Dyer, treasurer, and others.

New Orleans—Oil Refinery, etc.—Preston F. Hall, John J. Reilly, John C. Wickliffe and others have incorporated United States Refining Co., with capital stock of \$5,000,000, for refining petroleum and other oils.

Rayne—Electric-Light Plant and Water-works.—City will vote May 20 on issuance of \$5,000 of bonds for electric-light plant and water-works, previously mentioned. Address "The Mayor."

#### MARYLAND.

Baltimore—Contracting.—Chartered: Lauer & Harper Co., with capital stock of \$50,000, to carry on general contracting business, by W. J. Lauer, Isaac C. Harper, Chas. S. Watts and others.

Baltimore—Art-glass Works.—Chartered: Baumstork Art-Glass Works, with capital stock of \$30,000, by Gustav Baumstork, H. G. Brown, G. Wilmer and others.

Baltimore—Garbage Crematory.—Frederick W. Feldner, representing a syndicate, has received contract at \$147,300 for disposal of city garbage; plant will be erected in accordance with plans and specifications prepared by City Engineer E. S. Fendall and Commissioner Iglehart.

Baltimore—Cold-storage Plant.—Baltimore Cold Storage Co. has had plans made by Owens & Sisco for erection of three additional stories to its building.

Baltimore—Wallpaper Plant.—Maryland Wallpaper Co., recently organized with capital stock of \$50,000 by C. Wharton Smith, Geo. A. Smith and Stuart S. Janney, for manufacture and sale of wallpaper, will extensively enlarge and improve the plant of the old Conowingo Wallpaper Co.

Baltimore—Rolling Mill.—Baltimore Rolling Mill Co., for manufacture of bar iron and steel, has been incorporated, with capital stock of \$300,000. Company will build at first a 10-inch and an 18-inch train for an annual output of 20,000 to 25,000 tons of bar metal. Henry Wehr, Pratt and Frederick streets, will be president, and Chas. G. Phillips (for twenty years with the Diamond State Steel Co. of Wilmington, Del.) will be vice-president-treasurer.

Belair—Brick and Tile Works.—Chartered: Maryland Art Brick & Tile Co., to manufacture bricks and other articles of clay, with capital stock of \$300,000.

Cumberland—Telephone System.—Western Maryland Telephone Co. has received franchise for establishing an independent system in Cumberland.

Hagerstown—Manufacturing and Lumber Company.—Chartered: Tygart's Valley Manufacturing & Lumber Co., with capital stock of \$150,000, by Edward M. Allen, Jr., Richard H. Abney, Jr., Edward M. Medley and others.

Washington, D. C.—Electric-light Plant, etc.—J. P. Hall, 22 Thomas street, New York,

has contract at \$13,500 for electric plant at United States Soldiers' Home pumping station, previously reported.

#### MISSISSIPPI.

Coles—Cotton Gin.—R. E. Williams will erect cotton gin.

Ittabena—Cotton-oil Mill.—Ittabena Cotton Oil Co. has been organized, with capital of \$75,000, to erect cotton-oil mill. P. Cohen is president; J. H. Godsey, secretary-treasurer, and J. M. Phillips, general manager.

North Carrollton—Cotton-oil Mill.—Carroll County Oil Manufacturing Co. has been incorporated, as recently reported, for erection of a cottonseed-oil mill, contracts for which have not been let. Address T. W. Sullivan.\*

Pickens—Cotton-oil Mill.—Company with capital stock of \$45,000 has been organized with W. S. Gordon, president, for establishing cottonseed-oil mill; contracts for building or machinery not awarded.

Scranton—Stave Mill, Barrel Factory, etc. New Jersey Salt Co. of Morgan City, La., is establishing shipyard, stave and barrel plant at Scranton.

#### MISSOURI.

Ash Grove—Lead and Zinc Mines.—Florissant Development Co., reported during the week as incorporated for development of properties at Ash Grove, takes over eighty acres of fully developed mining land in Green county, and proposes to install a mill of 100 tons capacity per ten hours; no contracts have as yet been let for improvements or machinery. Address F. H. Littlefield, president.

Carthage—Water-works.—It is said that W. D. Boyer, Connell Building, Scranton, Miss., will construct works at Carthage, consisting of 2,000,000-gallon pump, 2,000,000-gallon filter, four miles of four-inch to 16-inch mains, reservoirs, etc.

Hannibal—Foundry.—Treat Manufacturing Co., manufacturer of car wheels, has purchased site and will erect combined iron and concrete building for enlarging its wheel works.

Kansas City—Rice Company.—Missouri Rice Co. has been incorporated, with capital stock of \$100,000, by B. D. Hurd, W. H. Calvert, R. E. Holloway and others.

Kansas City—Machine Company.—Chartered: Missouri Illustrated Machine Co., with capital of \$9000, by H. S. Halbert, J. A. Brubaker and G. D. Ferguson.

Odessa—Mercantile.—Chartered: Holloway Mercantile Co., with capital of \$5000, by F. A. Holloway and others.

Poplar Bluff—Stave Mill.—Lowell M. Palmer will rebuild his stave mill, previously burned.

Savannah—Implement Company.—Savannah Implement Co. has been incorporated, with capital of \$25,000, by B. L. Ralph, W. B. Cobb, J. L. Scudder and others.

St. Louis—Canal, Electric-power Plant, etc. Missouri & Merrimac River Water Co. proposes the construction of a canal twenty-two and one-half miles long for connecting the Missouri and Merrimac rivers to furnish electric power for commercial purposes; 20,000 horse-power would, it is said, be available. James R. Waddill and James E. Hereford, attorneys for company, have applied for permission to construct the canal across certain county roads. R. D. O. Johnson is engineer in charge of plans.

Sweet Springs—Flour Mill.—Sweet Springs Flouring Mills, owned by J. J. Jones and R. Sam Haynes, recently burned at a loss of \$47,000, will be rebuilt.

#### NORTH CAROLINA.

Barnard—Broom Factory.—C. A. Nichols contemplates establishing a broom factory in connection with the spoke and handle factory to be erected.

Burlington—Mercantile.—Chartered: F. L. Williamson Co., with capital stock of \$100,000, by F. L. Williamson and others.

Donaha—Cross-arm Factory.—W. L. Fleming will erect cross-arm factory.\*

Fayetteville—Bleaching and Finishing Plant.—Union Bleaching & Finishing Co. has been incorporated (under New Jersey laws), with capital stock of \$2,500,000, to bleach, dye and otherwise finish textile goods, etc., and will establish plants throughout the South, locating the first one at Fayetteville. Jas. B. Duggan is president; B. N. Duke of Durham, N. C., vice-president; Messrs. Duggan and Duke, Anthony N. Brady and Thomas F. Ryan of New York city, W. A. Erwin of Durham, N. C., and Samuel A. Beardsley, directors. Address vice-president at Durham.

Fayetteville—Silk Mill.—Ashley & Bailey Co. (New York office at 111 Spring street) will build another silk mill; present plant

has 15,000 spindles for spinning, and new plant will have looms for weaving.

Fayetteville—Cottonseed-oil Mill.—Company represented by F. K. Borden of Goldsboro, N. C., will establish cottonseed-oil mill at Fayetteville.

Franklin—Locust-pln, etc., Factory.—N. S. Thomas, Porter Dunlap and Chas. M. Baume have incorporated Carolina Locust Pln & Mica Co., with capital stock of \$15,000.

Greensboro—Medicine Factory.—Cincho Company has been organized, with capital stock of \$50,000, for manufacturing a nerve tonic.

High Shoals—Bridge.—Iron bridge will be constructed, as recently reported; to be double track, 16 feet wide and 300 feet long, made in two sections. Address A. O. Kale.

Maxton—Development Company.—McKinnon Development Co. has been incorporated, with capital of \$50,000, by A. J. McKinnon, E. M. Williams, E. F. Murray and others, for dealing in real estate, etc.

Oxford—Knitting Mill.—H. M. Shaw and associates contemplates establishing a knitting mill.\*

Rocky Mount—Brick Works.—Chartered: Rocky Mount Brick Co., with capital of \$20,000, by J. C. Brislwell and others.

Salisbury—Cotton Mill.—Kessler Manufacturing Co. will increase capital from \$125,000 to \$187,500 for the erection of a weaving mill of 300 looms to manufacture the product of the present 11,232 spindles. S. W. Cramer of Charlotte, N. C., is engineer.

Vanceboro—Transportation.—Vanceboro Steamboat Co. has been incorporated, with capital of \$5000, by W. E. Brown, J. B. Harvey, A. M. Williams and others.

Walkertown—Overall, etc., Factory.—J. W. Martin, J. C. Hammock, Jacob Huls and R. H. Flynn are incorporators of Martin Manufacturing Co., reported during the week as incorporated, with capital stock of \$25,000, for manufacture of overalls, suspenders, etc. Company has plant established, and will increase capacity to fifty dozen suspenders per day.\*

Weldon—Lumber Company.—Weldon Lumber Co. has been incorporated, with capital stock of \$100,000, by J. L. Shepherd of Petersburg; G. L. Vincent, Jarratts, Va.; C. A. Shepherd of Richmond, Va., and Seldon Goode of Weldon.

Wilmington—Machine Shops.—George T. Leach, W. B. Walling, J. M. Russell and others are incorporators of Mutual Machinery Co., reported during the week as incorporated, with capital stock of \$25,000, for manufacture of machinery.

Winston-Salem—Tobacco Company.—Whitaker-Harvey Tobacco Co. has been incorporated, with Mr. Whitaker, president, and Mr. Harvey, secretary. Plant is in operation.

#### SOUTH CAROLINA.

Aiken—Planing Mill.—W. F. Doby will erect planing mill and carpenter shop.

Charleston—Paint and Oil Company.—Chartered: Leland Moore Paint & Oil Co., to manufacture and deal in paints, oil, etc., by Leland Moore, R. S. Whaley, John B. Adger and W. H. Mixon. Capital stock is \$20,000.

Clio—Cotton-oil Mill.—E. Sternberger contemplates erecting cottonseed-oil mill, and will award contracts shortly.

Spartanburg—Cotton Mill.—Arch B. Calvert, lately reported as organizing cotton-mill company, has incorporated Drayton Mills, with capital stock of \$250,000. Other incorporators are John B. Cleveland, M. F. Floyd, W. A. Law, W. E. Burnett and A. L. White.

#### TENNESSEE.

Crab Orchard—Handle Factory.—Philip Wheat will establish factory for manufacturing axe handles, as recently reported; capacity will be 200 dozen per day; plant will be removed from Putnam county.

Jackson—Mercantile.—Chartered: Taliaferro Jewelry Co., with capital stock of \$10,000, by S. R. Robertson and others.

Jellico—Road Improvements and Bridge.—Campbell county will issue \$100,000 of bonds for road improvements and for constructing four steel bridges to cost \$1500 each. Address "County Clerk."

Knoxville—Woolen Mill.—Knoxville Woolen Mills is replacing old narrow looms with ninety new broad looms.

Knoxville—Cotton Mill.—Knoxville Cotton Mills' new looms (reported last week) will number 200.

Lincoln County—Oil Wells.—Tennessee Oil, Gas, Mining & Manufacturing Co., organized recently, has begun boring for oil on its 7000 acres of land in Lincoln county; has capital stock of \$150,000. Address care T. A. Shelton, Atlanta, Ga.

Mayland—Planing Mill.—J. E. Taylor and John Willbanks will establish a planing mill.

McKenzie—Water-works.—City contemplates constructing new system of water-works; D. A. Benkhater, chairman water committee.

Memphis—Ice and Cold-storage Plant.—Citizens' Ice & Cold Storage Co. has been incorporated, with capital of \$10,000. John Craig is president; W. A. Owen, secretary-treasurer.

Memphis—Wagon Factory.—Bodley Wagon Co. of Staunton, Va., will remove its plant to Memphis, as lately reported, and will erect new buildings, etc.

Memphis—Heating-apparatus Works.—Smart Heating Co. has established its plant at 839 Estival Place, Memphis, having recently been burned out at Carbondale, Ill.

Mt. Pleasant—Phosphate Mines.—Virginia-Carolina Chemical Co., Richmond, Va., has purchased and will operate the properties of Howard and Ridley phosphate companies at Mt. Pleasant.

Nashville—Fertilizer Works.—Federal Chemical Co. of Louisville, Ky., previously reported to erect large plant at West Nashville, has awarded contract for erection of two main buildings at \$12,000; fertilizer building will be 180x40 feet, and acid chambers 200x80 feet; both buildings of brick and wood.

Newport—Bridges.—Coke county court has decided to construct four bridges—new bridges at Del Rio and Bridgeport and rebuilding of structures at Newport and Oldtown, calling for four entirely new steel bridges; cost \$40,000. Address "Clerk of Coke County Court."\*

Ozone—Coal Mines and Coke Ovens.—Chicago-Tennessee Coal & Coke Co. recently perfected organization with David S. McMullen, president; H. J. Hanford, vice-president; W. M. Green, secretary, and Roger B. McMullen, treasurer, all of Chicago. Bonds to the amount of \$100,000 are being issued for development purposes, and arrangements are being made for opening coal mines and construction of coke ovens, etc. Main offices are at 125 La Salle street, Suite 800, Chicago. Address treasurer.

Rockdale—Iron Furnace.—J. J. Gray, Jr., of Sheffield, Ala., has purchased Rockdale furnace and will overhaul it at once, but will not enlarge it; will put in blast about June 10.

Springfield—Fertilizer Factory.—Singer & Johnson Fertilizer Co. of Nashville, Tenn., has purchased factory property in Springfield, and will equip it as a large fertilizer plant.

#### TEXAS.

Bay City—Mercantile.—Le Tulle Mercantile Co. has increased capital from \$25,000 to \$50,000.

Bay City—Irrigation Canals, Rice-land Cultivation, etc.—M. D. Chilson of Randolph, Neb., has purchased for himself and associates about 25,000 acres of land on each side of the Colorado river at about \$350,000. Their intention is to construct irrigation canals, colonize the lands with rice farmers and otherwise fully develop the property.

Beaumont—Furniture Company.—Globe Furniture Co. has been incorporated, with capital of \$20,000, by Jake Davis, H. M. Lasker and H. C. Kahn.

Beaumont—Oil Wells.—Vernon C. Fry, Geo. W. Videau, Frederick H. Norris and others have incorporated Cadillac Oil Co., with capital stock of \$450,000.

Beaumont—Hardware and Mill Supply.—Simmons Hardware & Mill Supply Co. has increased capital from \$10,000 to \$20,000.

Beaumont—Oil Wells.—Henry County Oil Co. has been incorporated, with capital stock of \$150,000, by Dr. J. Headland of Galva, Ill.; S. J. Sharp, J. H. Stewart of Kewanee, Ill., and others.

Brenham—Packing-house.—A. Kessling will erect packing-house with capacity of 100 hogs per day.

Brenham—Cotton Mill.—Brenham Cotton Mills, reported organized last week with \$150,000 capital, will build a 5000-spindle and 160-loom plant. D. C. Giddings, Jr., can be addressed.

Canyon City—Mercantile.—Chartered: Guber, Hume & Kenyon, with capital of \$20,000, by W. C. Kenyon and others.

Cleburne—Cotton-oil Mill.—Stock company with capital of \$50,000 has been organized for establishing cotton-oil mill. D. E. Wagoner is interested.

Dallas—Packing Company.—Armstrong Packing Co. has increased capital stock from \$250,000 to \$500,000.

Denison—Mercantile.—Chartered: Denison Grocery Co., with capital stock of \$100,000, by W. M. Lingo and others.

Deport—Oil Mill.—Deport Cotton Oil Co. is name of company reported lately as organiz-

ing to install cottonseed-oil mill; contract has been awarded for two-press mill with capacity of forty tons per day; J. H. Moore, secretary.

El Paso—Furnace.—B. L. Berkey will erect a 50-ton concentrating plant (as recently reported) near El Paso, for the production of pig-iron for foundry purposes; organization of company has not been perfected.

Fort Worth—Land Improvement.—North Fort Worth Townsite Co. has been incorporated, with capital stock of \$500,000, by Jos. B. Googins, L. V. Niles and W. B. King.

Gonzales—Cotton Compress.—American Cotton Co. (New York) shall probably build roundup-bale plant at Gonzales (as recently reported), the work to be under the direction of David Trainer, assistant operating manager, Memphis, Tenn.

Houston—Machine Shops.—Missouri, Kansas & Texas Railway system will build new shops at Smithville, of brick and stone, 250x260 feet, and install new machinery; A. A. Allen, general manager, St. Louis, Mo.

La Grange—Cotton Mill.—Board of Trade is endeavoring to organize company to build cotton mill.

Lane—Rice Mill.—Rice mill with capacity of 1000 barrels per day will be erected. Jonathan Lane of Houston, Texas, is interested.

Marshall—Building Company.—Chartered: Elk Building Co., with capital of \$15,000, by Holman Taylor and others.

Plano—Cotton-oil Mill.—Chartered: Plano Cotton Oil Co., with capital of \$35,000, by J. H. Bowman, T. C. Jasper, R. L. Stevens and others.

Rock Island—Cemetery Company.—Chartered: Myrtle Cemetery Co., with capital of \$1000, by Albert D. Rusk and others.

Sherman—Gaslight Company.—Sherman Gaslight Co., with capital of \$30,000, has been incorporated by E. L. Samuel of Frankfort, Ky.; Tom Randolph and J. R. Ellis of Sherman.

Strawn—Coal Mines.—Mt. Marion Coal Mining Co., reported lately as incorporated with capital stock of \$150,000, has purchased 2500 acres of coal lands, and will install machinery at once for mining. Address C. M. Berkley, secretary.\*

Temple—Cotton Gin.—A Mr. Eddy of Eddy, Texas, will build cotton gin at Temple.

Waco—Knitting Mill.—Waco Knitting Mill Co. has been organized to establish the knitting mill reported recently; will have capital of \$35,000. Directors are F. L. Carroll, J. T. Tyler, M. L. Garrett and others.

Wharton—Syrup Factory.—Jones Syrup Mill, burned several months ago, will be rebuilt on an enlarged scale; building will be 100x140 feet.

#### VIRGINIA.

Alexandria—Electric-light and Gas Plants. City will expend \$20,000 improving its electric-light and gas plants. Address "The Mayor."

Alexandria—Improvements.—City will vote on issuance of \$50,000 of bonds for public improvements; \$20,000 will be used in improvements to gas plant recently reported. Address "The Mayor."

Blackstone—Electric-light and Ice Plants. C. M. Ueber will build electric-light plant and ice plant.

Berkley—Land Improvement.—Camptella Heights Co., reported lately as having purchased Woodward farm and to improve same as a suburb, has incorporated, with capital stock of not less than \$20,000 nor more than \$100,000.

Christiansburg—Road Improvements.—Montgomery county will issue \$16,000 of bonds for macadamizing road from Christiansburg to Blacksburg. Address "County Clerk."

Clifton Forge—Street Paving.—City will issue \$15,000 of bonds for street paving, as lately reported; W. F. Tinsley, mayor.\*

Crewe—Telephone Exchange.—C. M. Ueber of Blackstone, Va., will build telephone exchange at Crewe, recently reported.

Fredericksburg—Shirt and Overall Factory.—Chas. I. Stengle is organizing a \$6000 company for manufacture of shirts and overalls, machinery for which has not been purchased.\*

Ivanhoe—Mining.—Chartered: Wissler Mining Co.

Lynchburg—Tobacco Factory.—Commonwealth Tobacco Co., incorporated under New Jersey laws with capital stock of \$500,000, has purchased, will enlarge and operate the Sneed Carrington Tobacco Co. of Lynchburg. Wm. H. Butler of New York is president; R. J. Sneed, vice-president, and E. A. Allen, secretary-treasurer.

Norfolk—Ice Factory.—People's Ice Co.

has been incorporated, with capital stock of \$10,000, for manufacture of ice. Chas. E. Scott is president; E. M. Bell, vice-president; Arthur J. Odell, treasurer, and A. J. Odell, secretary.

Norfolk—Land Improvement.—Jamestown Park & Land Co. will be organized, with capital stock of \$140,000, for purchasing and developing 3475 acres of land on the James river. D. R. Creecy & Co. are the promoters.

Norfolk—Electric-light Plant.—Norfolk Electric Light & Gas Co., recently organized by H. L. Page, R. B. Fentress and W. T. Simcoe, will arrange at once for erection of its electric-light plant.

Norfolk—Mercantile.—Chartered: Norfolk Antique Co., for dealing in jewelry and antiques, with capital of \$5000, by Charles Palmer (president) and others.

Norfolk—Lumber Company.—Norfolk Lumber Co. has been incorporated, with capital of \$25,000, for lumber manufacturing, by James E. Etheridge, president; L. O. Parrish of Fayetteville, N. C., vice-president, and H. W. Johnson, secretary-treasurer.

Norfolk—Paving.—Southern Paving & Construction Co. of Chattanooga, Tenn., has received contract at \$200,000 for paving Atlantic City ward.

Norfolk—Construction Company.—E. Cross & Son Co. has been incorporated, with authorized capital of \$10,000, for conducting general pile-driving, bridge-construction, dredging and warehouse business. Ethelred Cross of Portsmouth is president; Samuel Cross of Portsmouth, vice-president; R. I. Bosman of Norfolk, treasurer, and Chas. B. Cross of Portsmouth, secretary.

Portsmouth—Cotton-oil Mill.—Fred Oliver of Charlotte, N. C., and associates are said to have purchased site at Portsmouth for \$30,000 on which to erect large cottonseed-oil mill.

Richmond—Printing House.—Baughman Stationery Co. has had plans drawn for erection of large printing house, and E. T. D. Myers, Jr., will award contract for and superintend its erection.

Richmond—Iron Works.—Richmond Manufacturing Co. will apply for charter and erect large iron works.

Rockbridge Alum Springs—Ice and Cold-storage Plant and Steam Laundry.—James A. Frazier is erecting the ice and cold-storage plant and steam laundry recently reported. Contracts for machinery have been let.

Tomsbrook—Lime-kiln.—Rock Dale Lime Co. is erecting new lime-kiln with capacity of 100 barrels per day.

Urbanna—Shirt and Overall Factory.—A. Randolph Howard of Fredericksburg, Va., is figuring with New York parties for establishment of shirt and overall factory at Urbanna.\*

Waverly—Cannery.—Waverly Canning Co. is the name of the \$10,000 company reported lately as being organized for establishment of a cannery. John G. Hawley is president.

Waverly—Bottling Works.—John G. Hawley has purchased an interest in the Coppahunk Lithia Arsene Springs property, and will place the water on the market.

#### WEST VIRGINIA.

Bellington—Electric-light Plant and Water-works.—Company with capital stock of \$50,000 is arranging to construct electric plant and water-works. Address "The Mayor."

Bluefield—Supply Company.—Superior Supply Co. has been incorporated for erecting and operating furnaces, rolling mills, machine shops and foundries, etc., by W. F. McAytor and W. E. Dawless of Bluefield; H. S. Brown of Bramwell and others. Capital stock is \$100,000.

Charleston—Fire-brick Works.—Kanawha & New River Fire-Brick Co., previously reported incorporated for erection of brick works with capacity of 2,000,000 brick per year, will also install machinery for manufacture of tiles, fireproofing, etc.; clay will be mined and hauled by electric power. Edward B. Neal is general manager-treasurer, with office in Coyte & Richardson Building.

Charleston—Mining.—Chartered: Elk Mining Co., with capital of \$5000, by Robert Feltz, E. B. Stone, J. M. Herpeck and others.

Clarksburg—Land Improvement.—J. O. Brooks, J. H. Wheelwright, C. W. Watson and others of Fairmont, C. E. Pride, John W. Davis and others of Clarksburg have purchased 500 acres of land near Clarksburg, and will improve same by laying off in building lots and installing water-works, electric-light plant, etc.

Durbin—Broom Factory.—Barton Woodruff contemplates establishing broom factory.\*

Elkins—Telephone Company.—West Virginia Eastern Telephone Co. has been incor-

porated, with capital of \$10,000, by C. H. Scott, J. M. Woodford, O. J. King and others.

Kanawha Falls—Coal Mines.—Catawba Coal & Land Co., recently incorporated for development of coal mines in vicinity of Kanawha Falls, has completed organization with Dr. L. Pritchard, president; Grenville Lewis, Jr., vice-president, and C. E. Krebs, secretary-treasurer.

Keyser—Coal Mines.—Arnold Coal Co. has been incorporated, with capital of \$20,000, for developing coal mines, by D. A. Arnold, D. S. Arnold, F. L. Baker and others.

Parkersburg—Iron and Steel Company.—Monarch Iron & Steel Co. has begun erection of works for the manufacture of planished iron sheets under the patents of G. C. Broomall of Parkersburg; it has incorporated with capital stock of \$100,000. S. M. Nease of Pittsburg, Pa., is president; E. M. Whitte of Pittsburg, Pa., secretary; G. Broomall of Parkersburg, treasurer, and J. R. Rose of Parkersburg, general manager. Plant will, it is said, be in partial operation about May 1.

Morgantown—Oil Wells.—Oregon Oil Co., with capital of \$5000, has been incorporated by A. J. Hawse of Clarksburg, W. Va.; S. H. Bowman and L. P. Horr of Fremont, and F. P. Corbin of Morgantown.

Parkersburg—Gas-pipe Line.—It is said that Standard Oil Co. (New York) has awarded contract for 120 miles of 16-inch pipe, which it will lay at a cost of \$2,000,000 to pipe natural gas from its gas territory in Lewis county, West Virginia, to Toledo, Ohio.

Piedmont—Water-works Improvement.—City will lay forty tons of 10-inch water pipe; Chas. S. York, engineer, 1526 East Biddle street, Baltimore, Md.

Red House Shoals—Transfer Company.—Red House Transfer Co. has been incorporated to conduct general ferry and transfer business, by A. S. Leach, A. L. Leach, S. E. Leach and others; capital \$1000.

Riverside—Cement Plant.—The Ackerman interests, which are identified with the Cumberland (Md.) Hydraulic Cement & Manufacturing Co., are the promoters in the establishment of a cement plant at Riverside with capacity of 2000 barrels per day.

Wheeling—Oil Wells.—Star Petroleum Co., with capital stock of \$1,000,000, has been incorporated by H. T. McGregor, L. E. Schraeder, C. E. Morris and others.

#### INDIAN TERRITORY.

Ardmore—Cotton Compress.—Ardmore Compress Co., lately reported incorporated with capital stock of \$40,000, has contracted for installation of a 2000-ton compound lever 80-inch compress.

Collinsville—Water-works.—M. Vandervoort of Guthrie, O. T., will construct system of water-works at Collinsville.

Eufaula—Water-works.—Franchise for construction of water-works has been granted to C. E. Foley, Philip Brown and John McFarland.

South McAlester—Water Company.—Purcell Water Co. has been incorporated, with capital stock of \$45,000, by Dorset Cater, W. G. Blanchard and G. W. Brown.

Tulsa—Realty Company.—National Realty Co. has been incorporated, with capital of \$25,000, by Ellis Short, W. N. Robinson, Earl D. Bailey and others.

Wapanuka—Cotton-oil Mill.—Wapanuka Cottonseed Oil Co. has been incorporated, with capital stock of \$80,000, by James Burns, Robert E. Wade, Clarence H. Griffith and others.

#### OKLAHOMA TERRITORY.

Blackwell—Land and Coal Company.—Cherokee Land, Coal & Savings Co. has been incorporated, with capital stock of \$100,000, by H. S. Curley, A. J. Blackwell, W. G. Anderson and others.

Enid—Mercantile.—Wirt & Lyons Co., with capital of \$25,000, by W. H. Wirt and others.

Geary—Improvement Company.—Geary Improvement Co. has been incorporated, with capital stock of \$15,000, by L. J. Downey, Ed. Gillespie, H. S. Guthrie and others.

Leger—Cotton-oil Mill.—Leger Oil & Milling Co. has been incorporated, with capital stock of \$75,000, for manufacture of cottonseed oilcake and meal, by H. H. Davis of Weatherford, Texas; W. T. Wagoner of Decatur, Texas; R. E. Dunlap and others of Leger.

Oklahoma City—Brewery.—A. Ruemmel of St. Louis, Mo.; Adolphus Busch and Wm. J. Lemp of St. Louis, Mo., and others will organize Oklahoma Ice & Brewing Co., with capital stock of \$250,000, for establishment of ice factory and brewery; will also manufacture electric light and power; brewery capacity will be 75,000 barrels per year. Plans for buildings are being prepared by

Whitman, Walsh & Boisselier of St. Louis, Missouri.

Shawnee—Cotton Manufacturing.—Incorporated: Shawnee Cotton Textile Co., capital stock \$100,000, to manufacture cotton products, by H. F. Douglass, B. F. Hamilton, H. G. Beard, Columbus Lytal and F. P. Stearns.

#### BURNED.

Chilhowie, Va.—Chilhowie Lumber Co.'s mill; estimated loss \$40,000.

Columbus, Ga.—Columbus Iron Works; estimated loss \$225,000.

Cumberland, Md.—Mills of Cumberland Paper Co. damaged to extent of \$75,000.

Thomasville, N. C.—North State Manufacturing Co.'s cradle factory; loss \$3500.

#### BUILDING NOTES.

Atlanta, Ga.—College.—G. L. Normann's plans have been accepted for proposed \$30,000 science hall for Emory College. Bids will be asked for erection.

Baltimore, Md.—Church.—St. Stanislaus' Catholic Church, Rev. Father Morys, rector, will erect a branch church, two stories, of granite, after plans by Baldwin & Pennington.

Baltimore, Md.—Building.—Contract to erect Bohemian hall and gymnasium building has been awarded to A. Knell, Jr., at \$18,000.

Baltimore, Md.—Bank Building.—E. M. Noel has received contract at about \$100,000 for erection of proposed building of International Trust Co., previously reported.

Berkeley Springs, W. Va.—Hotel.—It is reported that a \$300,000 hotel will be erected by company represented by Calvin Chestnut of Baltimore, Md.

Birmingham, Ala.—Theater.—C. D. Hurley has contract at \$6000 for erecting proposed theater.

Birmingham, Ala.—College.—Birmingham Medical College will erect a four-story brick structure; Dr. L. C. Le Grande, secretary.

Birmingham, Ala.—Business Building.—W. D. Wood and W. B. Dickinson will erect five-story business building.

Camden, Ark.—Depot.—St. Louis Southwestern Railway will expend about \$50,000 in improvements to its property at Camden, including erection of a \$10,000 brick and stone passenger depot; F. H. Britton, general manager, St. Louis, Mo.

Cartersville, Ga.—Store Building.—Sam P. Jones will erect three-story brick store building to cost \$12,000.

Cartersville, Ga.—Depot.—Western & Atlantic depot will be enlarged at a cost of \$7000; contract awarded to R. W. Smith & Son.

Charlotte, N. C.—Warehouse.—W. S. Forbes & Co., packers, of Richmond, Va., have established a branch at Charlotte, as reported during the week, and will later on erect warehouse 40x100 feet.

Chattanooga, Tenn.—Asylum.—An appropriation of \$8000 is made for building an addition to county asylum for insane and for remodeling present structure. Address "County Clerk."

Clarksville, Ga.—Nursery, etc.—John Kellee of Fort Valley, Ga., has contracted with Cornelia Real Estate Co. for 500 acres of land near Clarksville; 200 acres will be improved as a nursery, erecting necessary buildings.

Columbus, Ga.—Cottages.—Eagle & Phenix Mills will contract for erection of twenty operatives' cottages.

Durham, N. C.—City Hall and Market.—Plans of Hook & Sawyer of Charlotte, N. C., have been accepted for proposed city hall and market at Durham, and bids for erection will be asked at once.

Elkins, W. Va.—Courthouse.—Bid of J. C. Conn of Uniontown, Pa., at \$110,881 has been accepted for erection of Randolph county's proposed courthouse.

El Paso, Texas—Sanitarium.—Dr. O. D. Weeks & Bro. will erect three-story sanitarium 110x130 feet.

Galveston, Texas—Auditorium.—Bowden & Worth have received contract for erection of proposed auditorium; plans by Geo. B. Stowe.

Gulford, Md.—Hotel.—Maryland Granite Co. of Baltimore, Md., has awarded contract to Eugene D. Springer for erection of a three-story hotel 200x50 feet.

Huntsville, Ala.—Business Block.—J. M. McKee has contract for remodeling Harrison Bros.' block.

Kinston, N. C.—Printing-plant Building.—Kinston Publishing Co. will erect building, of brick, 50x60 feet, three stories high, to have steam-heating equipment, light and ventilating shaft, glass roof, flats apartments, with ranges, heating, laundry tubs, etc. Structural manufacturers and contractors



are invited to submit estimates. (See advertisement.)

Knoxville, Tenn.—Hotel.—The erection of a new hotel is talked of. W. B. Lockett may possibly give information.

Louisville, Ky.—Apartment-house and Dwellings.—Adolph Hallenberg has completed plans and contracts have been let for erection of a four-story apartment-house, of brick, with stone trimmings, 225x100 feet, to cost \$100,000, and for eight two-and-a-half-story dwellings adjoining.

Marlin, Texas.—Hospital.—Dr. W. H. Allen has adopted plans and specifications for his proposed \$10,000 hospital.

Meridian, Miss.—Jail.—C. M. Rubush has submitted the lowest bid (\$29,250, including heating apparatus) for Lauderdale county's proposed jail.

Montgomery, Ala.—Building.—The Advertiser Company has awarded contract to J. B. Worthington for remodeling building recently purchased for \$12,000.

Morganton, W. Va.—Warehouse.—W. H. Bailey has let contract for erection of \$8000 warehouse to First Ward Planing Mill Co.

Nashville, Tenn.—Church.—Second Presbyterian congregation will build a \$25,000 church. Address "The Pastor."

Norfolk, Va.—Hospital.—Dr. Southgate Leigh has awarded contract for erection of his proposed hospital to E. Tatterson; plans were made by Kendall, Taylor & Stevens of Boston, Mass., and call for building, three stories, of brick and stone, with all modern improvements.

Paris, Ky.—Courthouse.—Plans and specifications are wanted for erection of a \$150,000 courthouse, as lately reported; building and vaults to be fireproof. Address J. W. Thomas, Jr., chairman or Hon. H. C. Smith, county judge.

Ponchatoula, La.—Hotel.—Louis Montville will build at Ponchatoula the three-story brick hotel lately reported under Brookhaven, Miss. Contracts have not been awarded for building, engineering or machinery.

Richmond, Va.—Hotel.—Bids will be opened April 23 in office of John Kevan Peebles, architect, Norfolk, Va., for erection of Zimmerman Hotel at Richmond.

Rolla, Mo.—School.—School of Mines has accepted plans of Van Brunt & Howe of Kansas City, Mo., for erection of proposed new building.

Ruston, La.—Courthouse.—Plans of J. Kelly Gordon Co. of Dallas, Texas, have been accepted for proposed courthouse at Ruston; building will cost \$33,000.

Savannah, Ga.—Dwellings.—J. C. Postell and W. H. Allen will erect twelve one-story brick dwellings.

Spencer, N. C.—Roundhouse, etc.—Southern Railway Co. has arranged for enlarging its roundhouse, as lately reported, and will increase capacity nine stalls; also proposes to build two car repair shops. Cost of improvements will be \$20,000, and will be under direction of Engineer Maintenance of Way R. Southgate, Salisbury, N. C.

St. Louis, Mo.—Warehouse.—American Manufacturing Co. will erect \$35,000 warehouse.

St. Louis, Mo.—Machinery Building.—Contract for erection of World's Fair Machinery Building has been awarded to Smith & Eastman at \$496,967; it will be 525x1000 feet.

Urbana, Va.—Hotel.—A. Randolph Howard of Fredericksburg, Va., will have plans prepared by Knoxville (Tenn.) parties for erection of a \$15,000 hotel at Urbana.

Versailles, Ky.—Jail and Residence.—W. O. Davis, R. L. Stout and E. Mulcahy have been appointed a committee to receive plans and specifications for erection of new jail and jailer's residence.

Westminster, S. C.—Store Building.—M. S. Stribling will erect brick store building.

West Point, Ga.—Warehouse.—West Point Wholesale Grocery Co. will erect \$7000 warehouse.

Yazoo City, Miss.—Natorium and Gymnasium.—"School Board" contemplates erection of a natatorium and gymnasium combined. Address E. S. Crane, president.

## RAILROAD CONSTRUCTION.

### Railways.

Augusta, Miss.—The Mobile, Jackson & Kansas City Railroad has, it is understood, finished its surveys from Augusta to a point twenty-five miles north of Newton.

Austin, Texas.—It is reported that the Weatherford, Mineral Wells & Northwestern Railroad is to be extended to connect with the Fort Worth & Denver City Railroad in the Panhandle.

Birmingham, Ala.—A survey has been completed as far as Nicol for the projected railroad which is to extend from Navy Cove, near Fort Morgan, to Birmingham.

Boonsboro, Va.—John Heald & Co. of Lynchburg are building a narrow-gauge railroad from Coleman's Falls to Jackson's Mountain. They own timber lands.

Burlington, N. C.—An electric line will, it is stated, be incorporated to build a road connecting Burlington, Graham, Haw River and River Falls, in Alamance county; capital \$100,000.

Carrollton, Ga.—The Villa Rica Branch Railway Co. has settled litigation concerning rights of way for a three-mile spur to the plant of the Virginia-Carolina Chemical Co., and it is reported that the contract for construction will be let immediately, to be completed in sixty days.

Cleburne, Texas.—Rights of way are being secured for the new railroad from Cleburne to Egan.

Denison, Texas.—It is reported that the Choctaw, Oklahoma & Gulf Railway will build a line from McLish to Denison, thirty-five miles.

Denison, Texas.—Eugene E. White of Sulphur, I. T., telegraphs from St. Louis that the St. Louis & San Francisco Railroad has accepted the proposition made by the people of Sulphur, and will extend its line from Hickory to that place immediately.

Elkton, Md.—The Pennsylvania Railroad is preparing to build a third track between Wilmington and Perryville.

Fairmont, W. Va.—The Fairmont & Clarksburg Electric Railroad Co. is receiving bids to extend its line from West Fairmont to Monongah.

Farmville, Va.—The Charlotte, Farmville & James River Valley Railway Co. has decided, in accordance with its charter, just approved by the governor, to construct its line from Farmville to Smithville, thence via South Boston and Houston to Danville. It will be a branch line to connect with the Southern Railway either at Drake's Branch or Keysville.

Frederick, Md.—The incorporators of the Liberty Copper Mines, near Woodsboro, will, it is reported, build a short railroad to connect the plant with either the Pennsylvania or the Western Maryland Railroad.

Goldsboro, N. C.—It is reported that the Cape Fear & Northern Railway will be extended to Swansboro.

Gueydan, La.—The Houston, Beaumont & New Orleans Railroad is a proposed line which is expected to pass through Gueydan. R. A. Hardaway of Harlin, Texas, has been in Gueydan looking for rights of way.

Guthrie, O. T.—It is reported that the Chicago, Rock Island & Pacific will extend its line from Enid to Guthrie.

Guthrie, Okla.—The Choctaw, Oklahoma & Gulf Railroad has completed a survey from Hewitt, I. T., to Lawton, where it connects with another branch. It reaches Comanche, on the Rock Island.

Hagerstown, Md.—Surveys are being made to continue the Boonsboro extension of the Hagerstown Electric Railway over the mountain to Myersville.

Hempstead, Texas.—A meeting has been held proposing the construction of a railroad from Hempstead to Stoneham. C. C. Waller, president of the Southwestern Promoting Co., was present.

Hickory, N. C.—A movement has begun to build a railroad from Hickory to the factory of the E. L. Shuford Manufacturing Co. A park and pleasure ground are proposed.

Houston, Texas.—Surveyors have begun work on the proposed line of the International & Great Northern Railroad from Houston to Beaumont.

Huntsville, Ala.—It is reported that a route for a trunk line railroad to be built through Kentucky, Tennessee and Alabama will soon be surveyed.

Jackson, Ky.—It is reported that the new railroad between Jackson and Frozen, which is being built by the Kentucky Lumber & Veneer Co., will be finished by the middle of summer.

Kanawha Falls, W. Va.—Engineers are completing the survey for the lower Loup Creek Railroad.

Laurens, S. C.—An effort is being made, it is understood, to build an electric railway between Laurens and Clinton by H. Y. Simpson and others.

Liberty, Mo.—The Chicago, Rock Island & Pacific Railway Co. is surveying, it is reported, for an air line from Benton, Mo., to Kansas City, so as to enter the latter over its own track, instead of using the Burlington.

Louisville, Ky.—R. S. Veech and others are interested in the Jeffersonville, New Albany & Sellersburg Rapid Transit Co., which is to build a line connecting those places.

Luraville, Fla.—The Suwannee & San Pedro Railway, which crosses the Suwannee four miles below Luraville, has been completed fifteen miles from Mayo toward Perry, which is to be the terminus of the road.

Montague, Texas.—The Oklahoma & Texas Southern Railway Co. is advertising for bids for the grading and cleaning of ten and one-half miles of railroad between the Missouri, Kansas & Texas Railroad and Montague. It is stated that the successful bidder will receive the option on grading and cleaning fifteen miles of line south to the Fort Worth & Denver Railroad at Sunset, Texas.

Montgomery, Ala.—The Alabama & Mississippi Railroad Co. has been chartered to build a lumber road from Vinegar Bend to Leksburg.

Murfreesboro, Tenn.—The county court has provided for a committee to consider the proposition of Dr. W. L. Dudley and others to build an electric railroad from Nashville to Murfreesboro.

Newport, Ark.—Work on the Jonesboro, Newport News & Western Railroad is reported to have begun. When completed the line will give a connection to Memphis over the Frisco.

Norfolk, Va.—Tracklaying has begun for the Chesapeake Transit Co. on its line to Cape Henry, sixteen miles long.

Norfolk, Va.—The Virginia Beach division of the Norfolk & Southern Railway will, it is understood, be extended from Virginia Beach to Cape Henry.

Piedmont, W. Va.—It is reported that grading will begin immediately on an extension of the West Virginia Central to connect with the Little Kanawha Railroad.

Richmond, Va.—George W. Stevens, president of the Chesapeake & Ohio Railway, is said to be one of the incorporators of the Big Sandy Railway Co., chartered in Kentucky, and it is also stated that the Chesapeake & Ohio is behind the new road.

Sapulpa, I. T.—The St. Louis & San Francisco is reported to have secured control of the Arkansas Valley & Western, and is said to be contemplating the extension of the line from Sapulpa to Enid, Okla., 125 miles.

Scottsboro, Ala.—Work has begun on a new railroad from Bridgeport up Doran's cove to the Needmore coal mines. The line will be eighteen miles long. McCall & Co. are the contractors.

Stantonsburg, N. C.—S. H. Crocker and others are endeavoring to organize a company for the construction of a railroad from Wilson to Stantonsburg, and thence to tide-water via Greenville or Snow Hill.

St. Louis, Mo.—Surveyors have begun work, it is reported, for the St. Louis, St. Charles & Western Railroad, an electric line from Chillicothe to Trenton, about twenty-five miles.

Wheeling, W. Va.—Surveys are being made, it is understood, for the Holly River & Addison Railroad, in which John T. McGraw of Grafton and others are interested.

Tyler, Texas.—It is reported that the St. Louis Southwestern has finally decided to extend from Lufkin to Orange via Beaumont, a distance of 100 miles.

Van Vleet, Texas.—The right of way for the Southern Pacific extension to Thompson's plantation is being cleared and graded.

Vidalia, Ga.—The survey for the Stillmore extension of the Millen & Southwestern Railroad has been completed as far as Vidalia, and it is understood that grading will begin immediately.

Vidalia, Ga.—The Darien & Western Railroad, according to a report, is to be extended to Vidalia from Walthourville, on the Savannah, Florida & Western. John S. Lane at Darien, Ga., is the general manager.

Vidalia, Ga.—It is reported that the Midville, Swainsboro & Red Bluff Railroad will be extended to Vidalia from Swainsboro. Jesse Thompson and others are interested in the line.

Wichita Falls, Texas.—It is reported that the Arkansas & Choctaw will soon let the contract for its line from Red River to Wichita Falls.

### Street Railways.

Baltimore, Md.—The city council has passed an ordinance authorizing the United Railways & Electric Co. to lay a number of curves and some new track.

Burlington, N. C.—A charter has been granted for the Graham, Burlington & River Falls Street Railway Co. to construct and operate a line from Burlington through Graham, River Falls and other places in Ala-

mance county. J. W. Menefee and others are the incorporators.

Chattanooga, Tenn.—The Chattanooga Electric Railway Co. and the Chattanooga & Lookout Mountain Railway have been granted franchises over roads in the county.

Chattanooga, Tenn.—The Rapid Transit Co. will, it is reported, establish a new line in Hill City.

Chattanooga, Tenn.—Franchises granted to the Chattanooga Electric Railway Co. provide for an extension of its Oak-street line, and also for an extension of the East Lake line.

Chattanooga, Tenn.—It is understood that the Rapid Transit Co. will begin work at once on the Georgia State Line extension.

Corsicana, Texas.—It is reported that contracts will be let soon for building the proposed electric street railroad.

Nashville, Tenn.—It is reported that the Nashville Railway receivers will apply for a franchise to build a double-track line along the Charlotte turnpike from the corporation line to Ninth street, in West Nashville.

Norfolk, Va.—The Chesapeake Transit Co. has begun laying track from the suburbs of Norfolk towards Cape Henry.

Oklahoma City, O. T.—The Metropolitan Construction Co. has been chartered to build street railways, gas plants, etc., by James R. Keaton, Frank Wells and others.

Spartanburg, S. C.—The Spartanburg Railway, Gas & Electric Co. has, it is understood, made preparations to construct the Church-street line of the electric railroad immediately.

## Machinery, Proposals and Supplies Wanted.

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.**

**Air Compressor.**—John Davis, 81 Haverhill street, Boston, Mass., wants second-hand belted air compressor, 16 or 18-inch cylinder.

**Bakery Equipment.**—Electric Steam Bakery Co., 1515 Second avenue, Birmingham, Ala., wants to purchase new modern bake oven.

**Ball-winding Machine.**—Vance Cotton Mill Co., Chattanooga, Tenn., wants to buy a ball-winding machine for balling wrapping twines.

**Baseball Supplies.**—See "Bicycle Sundries." Bicycle Sundries.—Peninsula Cycle Co., Bell Haven, Va., wants catalogues on bicycle sundries and baseball supplies.

**Blacksmith Shop.**—See "Machine Tools."

**Bobbin-factory Machinery.**—J. W. Sproles, Greenwood, S. C., wants addresses of makers of machinery for making rings for bobbins.

**Boiler and Engine.**—See "Electric Light Plant."

**Boiler and Engine.**—City of Elberton, Ga., will buy 150-horse-power boiler and 150-horse-power automatic engine for electric plant. Address Thomas M. Swip, president city council.

**Boiler and Engines.**—See "Chemical Works."

**Boilers and Engines.**—Battery Machinery Co., Rome, Ga., is in the market for six boilers (either skid or furnace), ranging from sixteen to thirty horse-power, and engines ranging from sixteen to twenty horse-power.

**Bottles.**—G. W. Pendavis, Baldwin, Fla., wants addresses of manufacturers of ink bottles.

**Bridges.**—Contracts will be let April 21 for construction of four steel bridges in Cocke county, Tennessee. Address "Clerk of Cocke County Court," Newport, Tenn.

**Broom Machinery.**—Barton Woodruff, Durbin, W. Va., wants to correspond with makers of broom machinery and supplies.

**Brewery Machinery.**—Thos. J. McBride, Shreveport, La., wants to correspond with manufacturers of brewery machinery.

**Builders' Materials.**—Lynchburg Builders' Exchange, Lynchburg, Va., wants catalogues, price-lists, etc., of builders' materials.

**Building Material.**—M. S. Stribling, West-

minister, S. C., wants prices on building materials, including roofing, etc.

**Building Materials.**—D. W. Jacobs, Clarksburg, W. Va., wants bids at once on complete line of building material, including roofing, metal ceilings, brick, etc.

**Building Supplies.**—V. Cascino, Box 911, Mexico City, Mexico, wants addresses of manufacturers of metal shingles.

**Building Supplies.**—Neal-Millard Company, 112-114 Bay street, west, Savannah, Ga., wants catalogues and price-lists on mantels, grates and tiling.

**Canal.**—Sealed proposals will be received until May 8 at office of drainage commission, New Orleans, La., Irwin Jamison, secretary, for construction of a lined and covered canal, and for lined and covered canal and pipe line, all in accordance with plans and specifications on file. Each bid must be accompanied by certified check for \$500 and bond to amount of one-quarter of estimated cost required. Usual rights reserved.

**Canning Machinery.**—Thos. J. McBride, Shreveport, La., wants to correspond with manufacturers of canning machinery.

**Chemical Works.**—Robert E. Gramling, 1427 S. Empire Building, Atlanta, Ga., wants 10-horse-power engine, boiler, piping, heating plant, ammonia machines, seven-horse-power motor, 120 alternating; one three-horse-power engine, tanks, etc.

**Church Furniture.**—Belle Haven Presbyterian Church, P. O. Box 16, Bell Haven, Va., will place orders for pews, pulpit stand, chairs, etc.

**Coffee Mill.**—W. M. Freese, Clarksburg, W. Va., wants estimates on machinery for equipping a liquid coffee plant.

**Coke Ovens.**—See "Mining Equipment."  
**Compressed Paper Manufacturers.**—See "Wheels."

**Electrical Machinery.**—See "Chemical Works."

**Electrical Machinery.**—Bowen & Street, 600 Citizens' Bank Building, Norfolk, Va., are in the market for three 220-volt direct-current motors, one 50 horse-power, one 60 horse-power and one 100 horse-power, new or second-hand.

**Electrical Supplies.**—F. O. Myers, Trion Factory, Ga., wants addresses of manufacturers of small desk fans with water motor attached.

**Electric-light Plant.**—City of Lebanon, Tenn., is in the market for complete light plant, including engine and boiler, wire, lamps, etc. Address A. M. McClain, mayor.

**Engine.**—Citizens' Lumber & Coal Co., Westminster, Md., wants to purchase second-hand gasoline engine.

**Engine.**—Dubois & Bond Bros., Piedmont, W. Va., will need a 200-horse-power engine.

**Engines.**—John Davis, 81 Haverhill street, Boston, Mass., wants 300-horse-power second-hand slide-valve engine and 250-horse-power engine, 14 to 18 feet diameter, 28 to 36-inch face, 10 to 12-inch bore.

**Excavating, Wharf Construction, etc.**—David Price, quartermaster, Fort Getty, S. C., will receive sealed proposals in triplicate until May 14 for constructing steel and iron wharf and excavating channel and basin to wharf. Information furnished on application. United States reserves usual rights.

**Firearms.**—R. F. Johnson, Ayden, N. C., wants addresses of firms dealing in gun material and pistols.

**Flour Mill.**—L. E. Blanchard, Harlem, Ga., is in the market for roller flour machinery.

**Foundry Equipment.**—See "Machine Tools."

**Ginnery.**—See "Oil Mill."

**Glass-factory Machinery.**—Dr. William Sindorf, Mobile, Ala., will want machinery for making airtight glass jars.

**Grinding Mill.**—Dixie Paint Co., 1720-1722 Tenth avenue, north, Birmingham, Ala., is in the market for a 42-inch under-running self-tramming ball mill for grinding mineral paint.

**Hardware Manufacturers.**—Josiah Moore, Greenwood, S. C., wants to correspond with manufacturers of screwdrivers.

**Heating Apparatus.**—D. W. Jacobs, Clarksburg, W. Va., wants bids at once on heating and lighting apparatus for store and office building.

**Knitting Mill.**—H. M. Shaw, Oxford, N. C., wants full information as to equipment of knitting mill, operation, cost of machinery, etc.

**Lighting Apparatus.**—See "Heating Apparatus."

**Machine Tools.**—See "Railway Equipment."

**Machine Tools.**—Crescent Bed Co., Ltd., New Orleans, La., wants power press or com-

bined shear and puncher, either new or second-hand; capacity punch one-half to five-eighths hole in one-half to five-eighths iron; shear in proportion.

**Machine Tools.**—Spruks Manufacturing Co., Washington, N. C., will purchase complete equipment for machine shop, foundry and blacksmith shop about April 15.

**Mining Equipment.**—Mt. Marion Coal Mining Co., C. M. Berkley, secretary-treasurer, Strawn, Texas, is in need of 150-horse-power engine, two 80-horse-power boilers, hoisting machinery, shaft fixtures and equipment.

**Mining Equipment.**—W. C. Robertson, 237 West Fourteenth street, New York city, wants to purchase pump and boiler to be used in gold placer mine. Machinery must be made in sections, no piece weighing over 200 pounds.

**Mining Equipment.**—Chicago-Tennessee Coal & Coke Co., Roger B. McMullen, treasurer, 125 La Salle street, Chicago, Ill., wants addresses of manufacturers of railway equipment, electric mining machinery, coke ovens, crushing and washing machinery.

**Mining Equipment.**—J. S. Stearns & Co., Ludington, Mich., will want boiler, engines, electric coal-cutting, screening and washing machinery, mine supplies, etc., for coal mines and coke ovens.

**Mining Machinery.**—L. D. Sampson Mining Co., Barboursville, Ky., is in the market for necessary machinery for mining lead and zinc.

**Odometer Manufacturers.**—Wallach Bros., 57 Gracechurch street, London, E. C., England, want name and address of makers of speed recorders for electric tram cars.

**Oil Mill.**—Shubuta Oil & Manufacturing Co., S. H. Floy, president, Shubuta, Miss., will need cottonseed-oil-mill outfit.

**Oil Mill.**—T. W. Sullivan, Carroll County Oil Manufacturing Co., North Carrollton, Miss., wants complete two-press outfit, including complete ginny.

**Oil Mill.**—E. Sternburger will soon award contracts for cottonseed-oil mill.

**Overall and Shirt Machinery.**—Chas. I. Stengle, Fredericksburg, Va., desires correspondence from makers of shirt and overall machinery.

**Overall-factory Equipment.**—A. Randolph Howard, Fredericksburg, Va., wants to correspond with manufacturers of machinery for making overalls and shirts.

**Paint-factory Machinery.**—See "Grinding Mill."

**Paving.**—W. F. Tinsley, Clifton Forge, Va., will receive bids on sidewalk paving.

**Paving Brick.**—C. M. Speer, superintendent streets, Newnan, Ga., wants prices on street-paving brick.

**Pipilng.**—Pioneer Oil & Gas Co., London, Ky., will want some well casing.

**Railway Equipment.**—Levert Lumber & Shingle Co., Ltd., Plaquemine, La., is in the market for two miles 35-pound steel rail, with plates, bolts and spikes; also twenty to twenty-four heavy logging cars for cypress, 36-inch gauge.

**Railway Equipment.**—Brunswick Lumber Co., Franklin, Va., wants one-half mile of 56 or 60-pound steel relaying rails. Quote price f. o. b. Petersburg, Va.

**Railway Equipment.**—A. C., Box 906, Birmingham, Ala., wants four to eight hopper-bottom cars in good condition, capacity not less than 40,000 pounds.

**Railway Equipment.**—Bowen & Street, Norfolk, Va., are in the market for three 6x10 second-hand narrow-gauge locomotives, with trailing truck and tank on frames; also one second-hand six-foot wheel press and one six-foot wheel lathe.

**Railway Equipment.**—Chas. T. Lehman, 1901 Powell avenue, Birmingham, Ala., is in the market for saddle-tank locomotive with six or seven-inch cylinder for standard and 36-inch gauges; send specifications and prices.

**Railway Equipment.**—St. Lawrence Boom & Manufacturing Co., Roncoveite, W. Va., wants one geared locomotive, 40-ton, standard-gauge, and one direct-connected locomotive, 60-ton, standard-gauge.

**Railway Equipment.**—Peacock's Iron Works, Selma, Ala., is in market for 15-ton standard-gauge locomotive for iron track, delivered in Mississippi, and for three miles of 30 to 35-pound relaying rails.

**Road Machinery.**—E. B. Tyler, Tulane Hotel, Nashville, Tenn., is in the market for two 8 or 10-ton steam road rollers, and wants prices f. o. b. Nashville.

**Rolling-mill Equipments.**—Henry Wehr, Pratt and Frederick streets, Baltimore, Md., will accept catalogues of rolling-mill equipment and kindred machinery.

**Sewerage.**—Sealed proposals addressed to

"Street Committee," Phoebus, Va., will be received until April 17 for constructing sewerage system. Bids must be accompanied by certified check for \$300. Plans and specifications may be obtained at recorder's office, or at office of Girard Chambers, engineer, Hampton, Va. Usual rights reserved.

**Sewers.**—Board of public works, Wm. W. Southgate, city engineer, Nashville, Tenn., will open bids April 22 for constructing four circular brick trunk sewers, in size from thirty inches to seven and one-half feet in diameter and requiring about 3,500,000 bricks, 32,000 cubic yards of excavation, besides iron, clay pipe and other necessary incidentals. Certified checks and bonds required, and usual rights reserved. Plans and specifications at city engineer's office.

**Sugar Machinery.**—John Davis, 81 Haverhill street, Boston, Mass., wants prices and description of second-hand sugar machinery.

**Suspender-factory Supplies.**—Martin Manufacturing Co., Walkertown, N. C., wants to correspond with manufacturers of suspender-factory materials, such as webbing, buckles, leather trimmings, etc.

**Textile Machinery.**—See "Ball-winding Machinery."

**Tiling.**—J. B. Harris, M. D., Vendome Building, Nashville, Tenn., wants to correspond with manufacturers of tiling (for lining furnace) to withstand a great degree of heat. Full information desired.

**Water Motor.**—See "Electrical Machinery."

**Water-works.**—Bids are asked for furnishing materials for proposed water-works at Denton, Md., until April 21. Address Jas. H. Trassare.

**Water-works.**—City of Apalachicola, Fla., wants to correspond with contractors relative to construction of 3000 water-works. Address G. W. Hinsley, city clerk, Box 2.

**Well-boring.**—Anderson Water, Light & Power Co., Anderson, S. C., wants to correspond with contractors relative to boring deep well that will furnish 100 gallons water a minute.

**Well-boring.**—Alabama Port Oil Co., 80 St. Francis street, Mobile, Ala., will receive estimates until April 21 for boring an oil well 1000, 1500 or 2000 feet; contractors to supply everything requisite for completion of well; bond required and usual rights reserved.

**Wheels.**—Salem Machine Works, Salem, Va., wants addresses of makers of compressed paper or fiber friction wheels; also of the manufacturers of dried rawhide.

**Woodworking Machinery.**—Thos. J. McBride, Shreveport, La., wants to correspond with makers of hardwood workers' machinery.

**Woodworking Machinery.**—Frank Wright, Cave Springs, Ga., wants to purchase woodworking machinery and job press for manufacture of fly-screens.

**Woodworking Machinery.**—Peacock Manufacturing Co., Salisbury, N. C., is in want of a second-hand buzz planer (Fay & Egan preferred).

**Woodworking Machinery.**—Virginia Hardwood Manufacturing Co., 354 Broadway, New York, N. Y., wants two double-spoke sanding machines with adjustable boxes; state size of pulleys, price, etc.

**Woodworking Machinery.**—McNeill-Holt Company, Troy, N. C., will be in the market for a short-log saw-mill and a three or six-saw combined lathe mill and bolter.

**Woodworking Machinery.**—W. L. Fleming, Donahua, N. C., wants to purchase machinery for making cross-arms, including second-hand planer that will dress four sides of 6x7 or 8-inch lumber.

**Woodworking Machinery.**—Battery Machinery Co., Rome, Ga., is in the market for second-hand resaw, planer (four surfacer), with matcher and molder, not to weigh over 5000 pounds, one combination iron-top saw table with resaw attachment, and one spoke and handle lathe.

**Woodworking Machinery.**—Hill & Morgan, Manufacturers' Record Building, Baltimore, Md., are in the market for an eight-inch four-side second-hand molder.

## TRADE NOTES.

**Into Larger Offices.**—American Diamond Rock Drill Co. has moved into larger and more commodious offices, and the address will be hereafter 95-97 Liberty street, New York.

**Johns-Manville in St. Louis.**—The St. Louis branch of H. W. Johns-Manville Company of New York reports having secured the contract for pipe covering in the new Bank of Commerce Building. The material used on all main pipes and risers is Asbestos-Sponge molded covering, and the branchings and hot-water tank will be covered with company's

Magnesia. Contract will amount to nearly \$1000.

**New Jersey Foundry & Machine Co.**—This company announces that its offices in New York city have been removed to 9-15 Murray street, where all communications should be addressed, and customers, both present and prospective, are invited to call.

**Manufacturing Site Offered.**—Manufacturers looking for a Southern location combining deep water and belt-line-railway facilities are invited to correspond with the McNally Manufacturing Oil Co., Norfolk, Va. The company has such a site, ten acres in extent, adjoining its oil mill.

**The Emmert Vises.**—Nordberg Manufacturing Co. of Waynesboro, Pa., writes the Emmert Manufacturing Co. of the same city as follows: "We have been using your vise on one of our benches for the past three weeks, and find that same works to our entire satisfaction. We therefore hand you herewith our order for twenty-three more vises." Users should investigate the Emmert vises.

**Furnished Ball Engines.**—Ball Engine Co. of Erie, Pa., furnished two engines, direct-connected to Crocker-Wheeler generators, for electric plant at Wallaceburg, Ont.; two engines, direct-connected to same make of generators, at Eaton, Col., and two vertical cross compound engines, direct-connected to General Electric generators, at Minneapolis. Ball Engine Co. builds the Ball engines that were supplied.

**Big Bald Mountain for Sale.**—A rare opportunity in Southern lands can be investigated by addressing Wm. Johnston, Jr., Asheville, N. C. The property will be sold May 7. It comprises Big Bald Mountain, whereon is 3919 acres of land containing 8,000,000 to 10,000,000 feet of hardwood and fancy timber, and with great possibilities for fruit-growing, grazing, dairying, stock-farming, mining, game and fish preserves, etc.

**Prison Improvements.**—The prison commissioners of Tennessee have just placed an order with the Hawley Down-Draft Furnace Co. of Atlanta, Ga., for 700 horse-power of Hawley furnaces for the water-tube and tubular boilers at the State prison in Nashville. The commissioners operate the State coal mines, but find it advantageous to install the Hawley furnaces, both for coal saving and smoke prevention at the present plant.

**Sales of Wells Light.**—The Wells Light Manufacturing Co. of New York reports its sales for the month of March, 1902, to be more than double those of any other two corresponding months put together. For the present month to 14th sales are equal to a full month's business. During the last six weeks the difficulty has been to obtain material to manufacture; the sale comes as a matter of course. "It's the Light." Contractors and other users of portable lights are invited to investigate.

**Soule Machinery Demanded.**—Owing to the rapidly-increasing demand for its special machinery, the Soule Steam Feed Works of Meridian, Miss., manufacturer of saw-mill specialties, is installing a large amount of new machine tools and building 30x60-foot addition to its shop. Increase in trade is specially marked from distant territory, notably California, Washington and Canada. Recent sales in California have been nine steam feeds, in Washington eight and in Canada three.

**Ordering Hicks Railway Equipment.**—Prompt deliveries and thoroughly efficient equipment are requirements that bring many important orders to F. M. Hicks of the Hicks Locomotive and Car Works of 225 Dearborn street, Chicago. Mr. Hicks filed during the past week orders for a passenger coach for Bellingham Bay & British Columbia Railroad; for fifty hopper-bottom gondolas, 80,000 pounds capacity, for Bessemer Coke Co. of Pittsburgh, Pa., and three 50-ton freight engines for Lake Erie & Detroit River Railroad.

**Besty Tools and Supplies.**—Messrs. Charles H. Besty & Co., Chicago, report their general business very good. They are making shipments of tools and supplies to all parts of the Union. They report numerous sales of Gardner grinders. Within the past week shipments of these well-known machines have been made to Oregon, Wisconsin, Connecticut, New York and Massachusetts. Besty & Co. are receiving many orders from agricultural-implement builders for their celebrated "Badger" and "Bonanza" oil cups, and are making liberal shipments of "Helmet" oil. The small tool business is very good indeed. A 300-page illustrated



catalogue of Besly products will be mailed to any address on application.

**A Gilt-Edge Investment.**—Southern cotton mills have always been profitable investments for capital, and during the past ten years, during which so many new and large mills have been established, capital from all sections of the country has sought the Southern field. Opportunities to obtain interests in established Southern mills have not been very numerous, yet occasionally some exceptionally good opportunity offers itself to the discerning investor. Such an opportunity is presented by the Olympia Cotton Mills of Columbia, S. C., in its certificates of indebtedness 6 per cent. gold bonds. Of the total amount of \$750,000, Messrs. J. Wm. Mendenhall & Co., bankers and brokers, Continental Trust Building, Baltimore, Md., offer \$500,000 at 100 and accrued interest. Messrs. Mendenhall & Co. recommend these certificates as a gilt-edge investment. Full details can be obtained on application to the firm.

### TRADE LITERATURE.

**Union Iron Works.**—This plant, located at Hoboken, N. J., manufactures apparatus for rapid and economic handling, hoisting, loading, unloading and conveying materials of various kinds; also industrial railways, portable track, switches and turntables, light and heavy steam hammer forgings, and all kinds of sheet steel and plate work made from No. 16 gauge to five-eighths inch thick. Messrs. Henderson & Schalscha, proprietors of the works, have issued a complete illustrated catalogue relative to their product, and users are invited to obtain particulars and prices before placing contracts elsewhere.

**Protection from Corrosion.**—The ability of the American engineer to design steel structures of great strength and pleasing architectural effect is shown in the eight half-tones on the handsome souvenir mailing card issued by Joseph Dixon Crucible Co. of Jersey City, N. J. The card is a piece of artistic advertising, and will prove of decided interest to constructing engineers and architects, to whom it will be sent on request. Dixon's silico-graphite paint, which protects these structures from corrosion, has been very extensively used in the South, West and sea-coast sections of the United States, also in Mexico, Australia, China, Japan, West Indies and Philippine Islands, and has proven its protective and wearing qualities in all climates.

**Something About Roofing.**—There are numerous kinds of roofing materials on the market offered to owners of buildings and to contractors. Yet comparatively few roofings fulfill the requirements as to waterproof and durable qualities. In this connection it is desired to call attention to the roofing manufactured by the Lincoln (N. J.) Waterproof Cloth Co., office at Bound Brook, N. J. This company's original flint reliable tough-coated waterproof durable roofing has no coal tar in it; acid or acid fumes cannot affect it; gases cannot injure it; water cannot rot or penetrate it; vermin cannot attack it, nor can wind dislodge it. This roofing is suitable for every character of building, and the manufacturer invites tests in any way and as severely as possible, and then a comparison with the result of the same tests applied to other roofings. Literature concerning the roofing and samples are ready for inquirers.

**Mr. J. P. Hornaday of the Maltby-Hornaday Co. of Cincinnati, O.,** during a recent visit in Baltimore expressed great confidence in the material future of the South. Mr. Hornaday has been active in developmental work in Kentucky and his firm is now interested in street-railway enterprises in that State and in Alabama. He sees in undeveloped water-power of the South particularly a great source of energy.

It is announced that the machine shop and joiner shops of the Newport News (Va.) Shipbuilding & Dry-Dock Co. are to be extended sixty feet, and that other improvements are to be made in the yards to meet the requirements of new contracts. Among the latest orders received is one from the Saginaw Steel Steamship Co. for an oil-tank vessel, 10,000 tons burden, 400 feet long, 50 feet beam and 24 draft.

The depot of the Western & Atlantic Railroad at Cartersville, Ga., is to be improved. R. W. Smith & Son of that town have the contract.

## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### Review of the Baltimore Market.

Office Manufacturers' Record, Baltimore, Md., April 16.

Seaboard Air Line stocks and bonds figured conspicuously in the Baltimore stock market during the week. A rapid advance in the common stock was caused by successive reports that the Seaboard would acquire control of the Louisville & Nashville Railroad, and that it would profit by the Louisville's acquisition of the Atlanta, Knoxville & Northern, while there were also rumors that other railway interests were endeavoring to obtain control of the Seaboard. None of the talk, however, came from authoritative sources, and some people inclined to the view that the advance was due principally to the listing of the Seaboard bonds on the New York Stock Exchange, and also to improvements in earnings. It was also surmised that the Louisville's proposed line from Cincinnati to Atlanta would benefit the Seaboard, and that there might be advantages accruing to the Seaboard system by an extension to Birmingham, connecting with the St. Louis & San Francisco Railroad. The trading in the stock, both common and preferred, and also in the 4 per cent. bonds, was large, and the activity continued during the week. The common stock started at 24½, rose fractionally, receded to the opening price, and then advanced step by step to 26. It next went ahead with considerable rapidity, barring fractional recessions at times, until it reached 27½, from which there was a partial reaction to 26½ after the announcement that John W. Gates had secured control of Louisville & Nashville. The preferred stock began the week at 45, dropped to 44½, and rose to 46½. Its course thereafter kept pace with the rise in the common until it reached 48½, from which it reacted to 46½. The changes in the price of the 4 per cent. bonds were between 84½ and 85½, and the 5 per cent. were steady at between 104½ and 104¾.

Not a little activity developed in United Railways income bonds, which were dealt in between 70½ and 71½. There was also considerable trading in the 4 per cent. first-mortgage bonds of the United Railways. The common stock moved between 16½ and 16¾, without particular interest. Some apprehension of legislation unfavorable to the company prevailed because of the extra session of the general assembly, but these fears were quieted by assurances that the legislature would confine itself to the special business for which it was summoned, namely, the tax levy.

Dullness characterized the securities of the G. B. & S. Brewing Co. The common stock was traded in at from 18½ to 19½; the income bonds at 46½ to 47, and the first-mortgage bonds around 54. Cotton Duck issues were steady at 11 to 12 for the common stock; 47 to 47½ for the income bonds, and 79½ to 79¾ for the 5 per cent. Consolidated Gas figured in the dealings to a considerable degree, selling at from 67½ up to 71½, it being said that the pool was advancing the price, now that the legislature had adjourned. United Electric Light & Power preferred sold at 41 to 41½.

The trust-company stocks were very quiet. Union Trust sold at from 64½ to 65; American Bonding at 85; Maryland Casualty at 49½ and 50; United States Fidelity at 153, and International at 127.

Mechanics' Bank changed hands at 31 and 31½; Howard Bank at 12; Farmers and Merchants' at 69½; Union Bank at 119½, and Marine at 37.

The Western Maryland situation continued unsettled, no sale of the property having yet been made, and the stock was traded in at 30 to 30½. Atlantic Coast Line sold at 118 to 121½, the preferred at 120 to 122; Atlantic Coast Line of Connecticut at 230. Consolidated Gas 6s sold at 114½; Georgia, Carolina & Northern 5s at 113½, and George's Creek Coal at 115. Seaboard & Roanoke 5s changed hands at 115½; Wilmington & Weldon 5s

at 122½; Georgia Southern & Florida 5s at 115½; Newport News & Old Point 5s at 106½, and Norfolk Street Railway 5s at 111½.

Securities traded in, but not otherwise quoted, were as follows: Virginia Midland 1sts, 109; Virginia Midland 2ds, 115 and 115½; Richmond & Danville gold 6s, 123; National Enameling preferred, 85½; Raleigh & Gaston 5s, 118½; Raleigh & Augusta 6s, 124½; Richmond Traction stock, 46; Carolina Central 4s, 98; Charleston & Western of North Carolina 5s, 111 and 111½; Atlanta Street Railway 5s, 107½.

### SECURITIES AT BALTIMORE.

Last Quotations of Stocks and Bonds During the Week Ended Wednesday, April 16, 1902.

Railroad Stocks.	Par.	Bid.	Asked.
Georgia Southern & Florida.....	100	48	...
Georgia Southern & Florida 2d Pref.....	100	80	...
United Railways & Electric Co.....	50	16½	16½
Seaboard Railway Common Stock.....	100	26	26½
Seaboard Railway Preferred Stock.....	100	46½	46½
Atlantic Coast Line of Conn.....	100	230	...
Bank Stocks.			
Citizens' National Bank.....	10	...	33½
Commercial and Farmers' National Bank.....	100	120	...
First National Bank.....	100	...	180
Merchants' National Bank.....	100	196	198
National Bank of Baltimore.....	100	118	...
National Bank of Commerce.....	15	28	30
National Marine Bank.....	30	35½	...
National Mechanics' Bank.....	10	31	...
National Union Bank of Maryland.....	100	119	119½
Third National Bank.....	100	...	120
Trust, Fidelity and Casualty Stocks.			
Baltimore Trust & Guarantee.....	100	300	315
Central Real Estate & Trust.....	50	...	59
Continental Trust.....	100	215	219
Fidelity & Deposit.....	50	...	106½
International Trust.....	100	126	127
Maryland Casualty.....	25	50½	51½
Maryland Trust.....	100	211	214
Mercantile Trust & Deposit Co.....	50	189	170½
Union Trust.....	50	64½	65½
United States Fidelity & Guaranty.....	100	152	164
Miscellaneous Stocks.			
G. B. & S. Brewing Co. (Voting Trust) Com.....	100	18½	18½
United Electric L. & P. Co. Pref. Stock.....	50	41½	41½
Cotton Duck.....	100	109	112½
Consolidated Coal.....	100	82	82
Georgia's Creek Coal.....	100	114	...
Consolidated Gas.....	100	71½	71½
Atlantic Transport.....	100	235	245
Railroad Bonds.			
Atlanta & Charlotte 1st 7s, 1907.....	115	...	115½
Char., Col. & Aug. 2d 7s, 1910.....	110	...	...
Georgia, Carolina & Northern 1st 5s, 1929.....	113	...	...
Georgia Southern & Florida 1st 5s, 1945.....	115	...	115½
Georgia Pacific 1st 5s, 1922.....	128½	...	129
Piedmont & Cumberland 1st 5s, 1911.....	109	...	...
Savannah, Florida & Western 5s, 1934.....	...	...	...
Seaboard & Roanoke 5s, 1926.....	115	...	115½
Virginia Midland 3d 6s, 1916.....	110	...	...
Virginia Midland 4th 3-4-5s, 1921.....	112	...	115
Virginia Midland 5th 5s, 1926.....	115½	...	...
West Virginia Central 1st 5s, 1911.....	115½	...	115½
Wilmington, Columbia & Augusta 6s, 1910.....	116	...	117
Wilmington & Weldon Gold 5s, 1935.....	122½	...	...
Charleston Consol'd Electric 5s, 1909.....	...	...	...
Knoxville Traction 1st 5s, 1928.....	...	...	...
Newport News & Old Point 5s, 1938.....	106	...	...
Norfolk Street Railway 5s, 1944.....	111½	...	111½
United Railways & Electric Cons. 1st 4s, 1949.....	95	...	95½
United Railways & Electric Incomes 4s, 1949.....	71½	...	71½
Seaboard 4s.....	84½	...	84½
Seaboard 10-year 5s.....	104½	...	104½
Georgia & Alabama Cons. 5s.....	...	...	113½
South Bound 5s.....	110½	...	...
Miscellaneous Bonds.			
Mt. Vernon & Woodberry Cotton Duck 5s.....	...	...	80
Mt. Vernon & Woodb'y Cot. Duck Incomes.....	46	...	47
G. B. & S. Brewing 1st 3-4s.....	53½	...	54
G. B. & S. Brewing 2d Incomes.....	46½	...	46½
United Electric Light & Power 4½s.....	85	...	85½
Consolidated Gas 5s, 1910.....	114	...	...
Consolidated Gas 5s, 1939.....	...	...	116½

### SOUTHERN COTTON MILL STOCKS

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending April 15.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	75	91
Alken Mfg. Co. (S. C.).....	97	...
Anderson Cotton Mills (S. C.).....	125	...
Arkwright Mills (S. C.).....	118½	123
Augusta Factory (Ga.).....	71	...
Avondale Mills (Ala.).....	82½	...
Bennettsville Mfg. Co. (S. C.).....	85	91
Bilb Mfg. Co. (Ga.).....	109½	...
Brandon Mills (S. C.).....	96½	...
Cabarrus Cotton Mills (N. C.).....	125	...
Clearwater Bichy & Mfg. Co. (Ga.).....	100	103
Clifton Mfg. Co. (S. C.).....	175	...
Clinton Cotton Mills (S. C.).....	119	...
Courtenay Mfg. Co. (S. C.).....	125	...
Dallas Mfg. Co. (Ala.).....	73	...
Darlington Mfg. Co. (S. C.).....	90	...
Eagle & Phenix Mills (Ga.).....	95	...
Enoree Mfg. Co. (S. C.).....	86	...
Enterprise Mfg. Co. (Ga.).....	94	...
Gaffney Mfg. Co. (S. C.).....	108	...
Granby Cotton Mills (S. C.).....	98	...
Granby Cotton Mills (S. C.) 1st Pfd.....	100	...
Graniteville Mfg. Co. (S. C.).....	165	170
Greenwood Cotton Mills (S. C.).....	103	...
Grendel Mills (S. C.).....	108½	...
Henrietta Mills (N. C.).....	202	...
King John P. Mfg. Co. (S. C.).....	95	...
Langley Mfg. Co. (S. C.).....	98	108
Laurens Cotton Mills (S. C.).....	148	...
Lockhart Mills (S. C.).....	109	...
Louise Mills (N. C.).....	101	...
Lynchburg Cotton Mills (Va.).....	125	130
Lynchburg Cotton Mills (Va.) Pfd.....	150	...
Manchester Cotton Mills (S. C.).....	115	...
Mayo Mills (N. C.).....	144	...
McColl Mfg. Co. (S. C.).....	108	...
Monaghan Mills (S. C.).....	90	...
Newberry Cotton Mills (S. C.).....	116	...

Norris Cotton Mills (S. C.).....	110	...
Orr Cotton Mills (S. C.).....	99	101½
Pacolet Mfg. Co. (S. C.).....	...	102½
Pelzer Mfg. Co. (S. C.).....	170	...
Piedmont Mfg. Co. (S. C.).....	167	175
Poe, F. W. Mfg. Co. (S. C.).....	128½	...
Richland Cotton Mills (S. C.).....	102	...
Richland Cotton Mills (S. C.) Pfd.....	101½	...
Roanoke Mills (N. C.).....	91	100
Sibley Mfg. Co. (Ga.).....	73	...
Southern Cotton Mills (N. C.).....	105	...
Spartan Mills (S. C.).....	127½	...
Trion Mfg. Co. (S. C.).....	120	...
Tucapau Mills (S. C.).....	125	...
Union Cotton Mills (S. C.).....	145	...
Union Cotton Mills (S. C.) Pfd.....	100	102
Victor Mfg. Co. (S. C.).....	114	...
Warren Mfg. Co. (S. C.).....	96	99
Warren Mfg. Co. (S. C.) Pfd.....	106	...
Washington Mills (Va.) Pfd.....	101½	105
Whitney Mfg. Co. (S. C.).....	115½	...
Wilmington Cot. Mills (N. C.) Pfd.....	100	...
Wiscasset Mills (N. C.).....	115	125

### Louisville & Nashville.

Heavy dealings last week in the stock of the Louisville & Nashville Railroad upon the New York Stock Exchange and a rapid advance in the price of the shares were the result of large purchases made by Harris, Gates & Co., brokers, in which firm John W. Gates is a special partner. After nearly a week in which the Louisville & Nashville situation was a mystery to Wall street, Harris, Gates & Co. made the announcement: "We have bought

control of the Louisville & Nashville road. We did not buy it for speculation, but for investment, believing absolutely in the present and future value of the property. There will not be any 'corner' in the stock. We have placed the entire matter in the hands of J. P. Morgan & Co., and requested them to act as arbiters in the situation, because of the prominence of the property, and desire not to disturb in any way the general market condition, and because we know that they (Morgan & Co.) have no interest whatever in the property or in recent purchases."

There were conferences at the office of J. P. Morgan & Co., at which were present George W. Perkins and William Pierston Hamilton, representing the Morgan interests; August Belmont, Samuel Spencer, president of the Southern Railway; Edwin Hawley, president of the Iowa Central and Minneapolis & St. Louis roads; John W. Gates, Talbot J. Taylor, head of the brokerage firm of that name, and son-in-law of James R. Keene, and Francis Lynde Stetson, one of Mr. Morgan's attorneys.

The announcement that John W. Gates had acquired control of the property was made immediately after the conferences. Mr. Perkins, for J. Pierpont Morgan & Co., gave out the following statement:

"At the request of Messrs. Harris, Gates & Co., who on their own independent account have recently made large purchases of Louisville & Nashville Railroad stock, Messrs. J. P. Morgan & Co., as bankers, have consented to take control of the stock so purchased and to receive the same on deposit. They have so consented solely to relieve the general financial condition, and not for the benefit of any railway company. The Southern Railway has no interest, direct or indirect, present or prospective, in this stock or in its purchase or deposit. Messrs. J. P. Morgan & Co. are acting with the cordial assent of Messrs. August Belmont & Co."

After Mr. August Belmont had read the foregoing statement from Morgan & Co. he gave out the following typewritten statement:

"I have been aware of the negotiations by which J. P. Morgan & Co. have consented to take control and deposit of the stock of the Louisville & Nashville Railroad Co., purchased by Harris, Gates & Co. The statement of Messrs. J. P. Morgan & Co., just made public, has my unqualified approval, and there will be no contest for the control of the Louisville & Nashville Railroad Co."

President Spencer of the Southern Railway is quoted as saying:

"You can say positively that Louisville will not pass to the Southern Railway, nor will it be controlled by the Southern Railway."

#### Florida's Treasury Report.

State Comptroller A. C. Croom of Florida has made his first annual report to the governor. The report shows that the balance in the treasury to the account of the general revenue fund, January 1, 1901, was \$277,885, and although the appropriations for the year were \$156,808 more than the ordinary expenses, the balance in the treasury on December 31, 1901, was \$190,482. The assessed valuation of property is \$800,000 more than the previous year, and the comptroller estimates that the revenue from 1902 will be greater than before.

In explanation of the increased expenditures, the report refers to \$22,735 on account of the Jacksonville fire and appropriations for education of more than \$60,000 in excess of previous years. The comptroller further calls attention to the fact that 7 per cent. State bonds amounting to \$267,700 have been refunded at 3

per cent., and remarks that when the 6 per cent. bonds are refunded next January at 3 per cent. there will result a saving of more than \$30,000 annually in interest.

The comptroller has also recommended to the consideration of the governor that the three mills authorized for general revenue purposes by the legislature be by executive order reduced to two and a-half mills for the year 1902, and the governor has replied to this recommendation stating his decision to so reduce the tax rate.

#### Tennessee's Debt Reduction.

Governor McMillan of Tennessee has issued a letter announcing a reduction of \$1,896,500 of the State's debt in a period of three years and three months. The bonded debt of the State, including debts to charitable and educational institutions, is \$15,658,800, exclusive of some old bonds now in controversy with the government. The governor says that when he was inaugurated, January 16, 1899, the State had a floating debt of \$850,000. All the floating debt and interest thereon has been paid, amounting to \$883,707.85, the rate of interest being 3½ per cent. Several other items made a total floating debt of \$910,465.24, all of which has been paid off. The State has purchased under the sinking-fund act \$905,100 of its own securities, and has in the sinking fund \$74,000 cash to be used for the purchase of bonds. In conclusion the governor says:

"Much credit is due to the economic legislatures which have co-operated with me in this work, and to the State officials and county officials, through whom this money has been collected and paid promptly. All of this has been accomplished without borrowing a dollar, and the State has on hand and in sight enough money to pay the interest and expenses of this year without borrowing."

#### Prosperous Louisiana Banks.

The quarterly statement of the Bank of Napoleonville, La., shows capital \$30,000, surplus \$10,000, undivided profits of \$18,910, individual deposits not bearing interest \$236,296.

The Bank of Assumption, La., reports \$25,000 capital, profits \$3938 and deposits \$137,121.

The Bank of Donaldsonville reports capital, surplus and undivided profits, less expenses and taxes, \$91,369, an increase of \$7070 over last year; deposits, \$239,384; total of business for the quarter \$414,079, an increase of \$96,000 as compared with a year ago.

The Bank of Ascension, also at Donaldsonville, reports net capital and surplus \$38,626, deposits \$123,333, and total of business for the quarter \$222,313.

The People's Bank of Donaldsonville reports total business for the quarter \$222,313, deposits \$123,333, net capital and surplus \$38,626.

#### Report on Mississippi Banks.

The comparative statement of the condition of the State banks of Mississippi issued by Auditor Cole shows them to be in a healthful condition. There have been twelve new banks established in a little more than a year.

The statement shows total capital, \$5,193,311—increased since January 1, 1901, \$517,060; surplus, \$877,249—increased, \$220,113; undivided profits, \$871,444—increased, \$127,345; individual deposits subject to check, \$17,303,773—increased, \$1,159,114; time deposits, \$1,005,878—increased, \$127,245; loans and discounts, \$14,456,545—increased, \$2,818,932.

#### Oklahoma Banks.

According to the report of the Territorial bank commissioner, Paul F. Cooper,

the condition of the banks of Oklahoma Territory, 150 banks reporting, showed at the close of business March 12 an increase of deposits of \$636,190 since the call of September 30 last. The total deposits are \$7,738,747, and the total resources \$9,456,000. The average reserve held is 54.1 per cent., and the percentage of undivided profits and surplus to capital is 33.8.

#### New Corporations.

The Farmers' Bank of Dearborn, Mo., has increased its capital from \$10,000 to \$15,000.

H. H. Woolridge and others are reported to be organizing a new bank at Woolridge, Mo.

A movement is under way, it is reported, to organize a bank with \$10,000 capital at Salvisa, Ky.

At Petersburg, Ky., is reported that Charles W. Jenkins will organize a bank, with Solon Early as cashier.

The Emerson State Bank of Emerson, Okla., has been incorporated by H. S. Emerson and others; capital \$10,000.

Frank Gaskins and others are endeavoring to organize a bank at Fairmont, W. Va. The capital proposed is \$25,000.

The Ewing Deposit Bank has been incorporated at Ewing, Ky.; capital \$15,000. T. H. Talbot is one of the incorporators.

It is reported from La Follette, Tenn., that John E. Searles and others have organized a new bank, with \$25,000 capital.

The Davidson County Mutual Fire Insurance Co. has been incorporated at Lexington, N. C., by W. C. Leonard and others.

The First National Bank of Burlington Junction, Mo., has been approved by the comptroller of the currency; capital \$25,000.

The Columbia Insurance & Casualty Co. has been chartered at Columbia, S. C., with \$25,000 capital. A. M. Meetze is president.

Local capitalists of Natchez, Miss., have, it is reported, agreed to organize a trust and banking company, with \$100,000 capital.

The Bank of Walters at Walters, Okla., has been chartered, with \$5000 capital. George W. Graham and others being the incorporators.

The Bank of Glendean, Ky., has been organized, with \$15,000 capital. D. C. Moorman is president, and Arthur E. Smith, cashier.

The Bank of Adams, Robertson county, Tennessee, has been chartered, with \$20,000 capital. J. E. Winters and others are the incorporators.

The People's Bank has been organized at Jonestown, Miss., with Dr. W. C. Weathersby of Clarksdale as president; capital stock \$10,000.

At Dublin, Ga., efforts are being made, it is understood, by F. G. Corker and J. E. Smith, Jr., to organize a national bank, with \$50,000 capital.

The Kingfisher Investment Co. of Kingfisher, Okla., has been chartered, with \$50,000 capital. E. J. Kelly and others are the incorporators.

The People's Bank of Harrison, Ark., has been incorporated, with John A. Bunch, president; J. O. Mitchell, secretary and treasurer; capital \$25,000.

A bank with \$30,000 capital has been organized at Foreman, Ark. George T. Lemons of New Boston, Texas, is president, and Carl Schuman is cashier.

The First National Bank of Lubbock, Texas, has been authorized to begin business with \$40,000 capital. R. M. Clayton is president, and I. L. Hunt, cashier.

The First National Bank of San Augustine, Texas, has been organized, with \$25,000 capital. James C. Anderson is president, and T. B. Sanders, cashier.

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The Mecklenburg Farmers' Mutual Fire Insurance Co. of Charlotte, N. C., has been incorporated by H. D. Stone, J. H. McClintock, W. P. Carver and others.

The Consolidated Credit Co. of North Carolina has begun business at Charlotte, N. C., with W. R. Summerson as president, and E. P. Summerson, treasurer.

[For Additional Financial News, See Pages 32 and 33.]



